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Impact Of Sustainable HRM Practices on Employee Performance During Covid-19

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Abstract

This study aims to investigate the impact of Sustainable Human Resource Practices on Employee Performance during COVID-19. This study seeks to examine the effect of employee care, work flexibility, employee cooperation, and training on employee performance during COVID-19. The target population of the study is the Banking sector of Sialkot, Pakistan. The results concluded that employee care, work flexibility, employee cooperation and training have a significant positive relationship with employee performance. The study suggests that these practices must be incorporated in the work places to improve the employee performance. The concept of sustainable human resource management (HRM) has not been widely studied in Pakistan and this study is a contribution towards filling this gap. For future studies, the impact of Sustainable HRM may be examined across various sectors in Pakistan, with larger sample sizes.

Keywords: Sustainable HRM; COVID-19; Employee Performance; Banking Sector; Pakistan

1. Introduction

Human resource management refers to the organized or systematic process of managing the human resources of an organization i.e. the people working in an organization. Human Resource Management can be defined as an effective and efficient management of the people working in an organization so that organizational and individual objectives are met. The main functions of HRM include; hiring employees, training employees, appraising performance of employees, compensating employees, and managing the employer-employee relations (Gary, 2011).

“HRM is a distinctive approach to employment management, which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce...” (Storey, 1995, p. 5). HRM considers employees to be the most valuable asset of the organization. As organizations are made up of people, who work together to achieve common organizational objectives, hence it is important keep them motivated in order to achieve the desired organizational performance and to keep employees committed to the organization (DeCenzo & Robbins, 2010). HRM is concerned with managing employees during every phase of their employment, so human

resource management can strongly impact the employee performance. A carefully developed human resource management can help organization to meet and exceed its goals.

Studies have proven a positive relation between human resource practices and employee performance but recently attention has been diverted to a new concept of “Sustainable Human Resource Management”. This concept is gaining a lot importance in Pakistan in recent years. Sustainable HRM is defined as the recruitment, selection, training and development, and decruitment of employees, that is socially responsible and economically beneficial to the organization (Ehnert, 2006). Organizations are now realizing the need incorporate sustainable human resource practices and are now placing much importance to it. In sustainable human resource management there is a focus on abstaining from the use of HR practices that affect the employees and the society negatively, and from using HR practices that are focused on cutting short-term financial costs, at the expensive of long-term financial, social and ecological costs (Mariappanadar, 2003). Secondly it involves establishing a relationship between the employees and the organization that is mutually beneficial (Ehnert, 2009).

A few studies have been conducted in Pakistan to check the impact of sustainable human resource management on employee performance but thus far to our knowledge, no study has been conducted to study that how sustainable human resource practices have impacted employee performance during COVID-19, the global pandemic, when employee performance was being affected due to presenteeism , safety concerns, expected layoffs, difficulties in adapting to virtual teams, telecommuting, difficulty in maintaining work life balance, and social distancing. So far no research has been conducted in context of the banking sector or any other sector of Sialkot. So this study seeks to close this gap by focusing on a new idea, where an untapped sector and effects of global pandemic are being included to check how sustainable human resource management and job performance will relate under such condition. The objective of this research paper is to develop and broaden the understanding of this concept considering new conditions, sector and city.

This study takes sustainable human resource practices as an independent variable and employee performance as a dependent variable. This study is aims to answer that how sustainable HR practices such as care for employees, work flexibility, employee cooperation and training, have impacted employee performance during global pandemic COVID-19.

In the second section of this article the relevant literature has been discussed, and hypothesis and theoretical frame work has been developed. Research methodology has been mentioned in the

section 3. Section four shows the results of the data analysis and their interpretation. In section five and six discussion and conclusion is presented. In section 7 managerial implications are discussed. In the last section, limitations of the study and recommendations have been included respectively.

2. Literature review

2.1. Theoretical Background through “Social Exchange Theory”:

This research is build upon the “Social exchange theory”. This theory is considered to be one of the most influential concepts of Sociology and Social Psychology (Narwin, 2016). A social exchange can be referred as “a two-sided, mutually contingent, and mutually rewarding process” (Emerson, 1976, p. 336). The theory states that the social human behaviour or relationships are primarily based on a exchange process, whereby each individual assesses the benefits and the risks of the relationship (Homans, 1958). Organ (1990) writes that social exchange theory is reciprocal in nature; this means that if employees receive what they perceive as favourable treatment from the organization, they will reciprocate by taking actions and decisions that promise more positive outcomes for the organization. This helps to create ‘give and take’ relationship between the organization and the employees that maximizes benefits for both.

If organizations design their HRM practices on the basis of “Social Exchange Theory” i.e. making their HR practices more gratifying for the employees, the organizations can benefit, in the form of increased employee loyalty, engagement and motivation (Narwin, 2016). So in a nutshell while the organization considers the interest of the employees; the employees reciprocate or give back to the organization by achieving the organizational goals by means of improved employee performance. Therefore it can be said that the sustainable HRM practices are based on the premise of social exchange theory, as “Social Exchange Theory” states that lasting and fulfilling social relationships are formulated on the basis of mutual benefit, sustainable HR practices also aim to develop a relationship between the employer, employees, community and environment that is mutually rewarding for all the parties involved.

2.2. Employee Performance

‘Individual Performance’ or ‘Job Performance’ are some of the other names for ‘Employee Performance’ (Fonkeng, 2018). It is a multifaceted concept that has been defined by numerous scholars all over the world. Campbell (1990) defines employee performance as activities, behavior or actions of employees that help the organization achieve its objectives. According to Fonkeng

(2018) the employee performance refers to the execution of tasks and responsibilities relating to the job, and how well they're performed. It is concerned with the quality and quantity of the output or the effectiveness and efficiency of the work performed.

Good performance of employees is important for the success of the organization. There are numerous studies that confirm the relationship between good employee performance and good organizational performance. Performance appraisals are carried out routinely by organizations to evaluate the performance of the employees against pre set performance standards, as part of performance management process.

In the wake of COVID-19 businesses had to adapt quickly to the changing conditions, such as work from home practices. For employees it meant adopting new ways of working, managing work life balance, learning new digital skills and leading virtual teams (Agrawal et al., 2020). Employees reported increased level of stress, anxiety, and frustration because of overall uncertainty, job insecurity, fear of virus contraction, and social isolation (Hamouche, 2020). These factors are known for effecting the employee performance adversely (Aguiar-Quintana et al., 2021).

Different researches have attempted to define the dimensions of the employee performance. For instance Koopmans et al. (2014) outlines three aspects of employee performance namely task performance, contextual performance and counterproductive work behaviors. Similarly a study by Pradhan and Jena (2017) points out the same dimensions of employee performance but introduces adaptive performance as the third dimensions instead of counterproductive work behaviors. The study suggests that task performance refers to the behavior of employees associated with carrying out the basic tasks and responsibilities assigned to them as part of their job description. This implies that task performance depends on the skill of an employee to perform the task, and the ability to strategically plan and execute the task in an effective and efficient way. Contextual performance refers to the behavior of an employee which directly or indirectly promotes the general well being of the organization including employees. Baard et al. (2014) defines adaptive performance refers to how well the employees performance when faced with a challenge. This study, however aims to study the impact of sustainable HR practices on task performance of employees.

2.3. Sustainable HR practices

The topic of sustainable Human Resource practices has received significant importance in the last two decades, and this attention continues to grow. The question here arises what is sustainable HRM and how it differs from traditional HRM? Sustainable HRM can be defined as the incorporation of HRM strategies that are long-term oriented, and which help the organization achieve its financial, ecological and social objectives, which make impact within the organization as well as outside the organization (Ehnert et al., 2016). According to Stankevičiūtė and Savanevičienė (2018) justice and fairness at workplace, focus on employee development, encouraging employee participation, offering work flexibility, fostering workplace cooperation and care for environment are some of the major characteristics of sustainable HRM. Another study states that Sustainable HRM focuses on establishing relationship with the employees that is based on sincerity, providing good working conditions to the workers, providing opportunities to employees for growth and development, and ensuring the physical, mental and emotional wellbeing of the employees at workplace (Wikhamn, 2019). Dyllick and Muff (2016) highlights four dimensions of sustainable HRM which include Common Good HRM, Green HRM, Socially Responsible HRM and Triple Bottom Line HRM

Sustainable HRM does not only focus on the financial performance of the organization, instead it focuses on a broad range of objectives (Ehnert et al., 2016). This is supported by Kramar (2014) which says that while strategic HRM focuses on the organizational performance usually in terms of monetary or financial gains, sustainable HRM focuses on environmental, social, human and financial outcomes. Another study argues that traditional HRM does consider employees as an important asset of the firm, which is crucial to achieve good organizational performance, but it does not gives importance to their problems and concerns, and treats employees as means to an end (Guest, 1997). Another study writes that sustainable HRM aims to manage employees in a way that they help the organization to meet its objectives, and doing so, while meeting their personal, family and community needs (Sang & Kirui).

A number of studies have proved a positive relationship between sustainable HRM and customer satisfaction, organizational performance, employee performance and other variables. For instance Malik et al. (2020) examined the impact of sustainable HRM practices on the employee performance in the forest industry in Pakistan, using organization commitment as a moderator. The results of the research stated that sustainable recruitment and selection, training and

development, compensation and rewards, and performance appraisal have positive relation with employee performance. Thus, the studies related to sustainable HRM and their impact on the performance of employees and organizations must be expanded across different sectors, industries and cultures. This study examines the impact of following sustainable HR practices; Care for Employees, Work Flexibility, Employee Cooperation, and Training, on the employee performance during COVID-19, in the banking sector of Sialkot, Pakistan.

2.3.1. Care for Employees and Employee Performance

Sustainable HRM emphasizes that organizations must retain healthy and productive workforce (Ehnert, 2009). Stankevičiūtė and Savanevičienė (2018) wrote that care of employees by the organization; refers to the safety and health management of employees or the management's safety practices. This includes working conditions, workload, stress, prevention of diseases and other safety standards. Another study explains occupational health and safety management as those HR strategies that are employed to reduce or minimize any factors at the workplace that may harm the workers or put their health and safety at risk (Den Hartog & Verburg, 2004). A recent study pointed out that as employees are returning to workplaces, employers are facing a major challenge of reducing the transmission of COVID-19 at workplace (Barnes & Sax, 2020). COVID-19 safety measures need to be in place in order to ensure safety of workers and smooth running of the businesses.

A study by Anitha (2014) showed that the working conditions had significant impact on the employee engagement which in turn affects the employee performance. Similarly according to Guastello (1992) employees who believe that their workplaces are safe experience lower levels of job anxiety and stress. Another study by Kaynak et al. (2016) confirmed that there is a significant relationship between safety procedures, and health and safety rules in an organization and, employee performance. This study aims to examine the relationship between management safety practices during COVID-19 and employee performance. Therefore, following is hypothesized:

H1a: There is a significant positive relation between care for employees and employee performance during COVID-19.

H1b: There is a significant positive impact of employee on employee performance during COVID-19.

2.3.2. Work Flexibility and Employee Performance

Work Flexibility, is part of Sustainable HRM practice. It is important to note that work flexibility must be offered in accordance with the needs of the employee, not the employer. The need for flexibility in reference to remote working and working hours was first recognized by Finnish companies (Järlström et al., 2018). Concepts like flexible working hours, remote working and part-time working are becoming increasingly common. A study by Russell et al. (2009) showed that part-time work and flexi-time tend to reduce work pressure and work-life conflict. A study on Turkish firms revealed that flexible working hours which allows employees to decide their timings for coming to, and leaving the workplace, have high loyalty towards the organization (Altindag & Siller, 2014). However a study by Albion (2004) states that organizations can harness the benefit of flexible work options in the form of good employee performance only if the flexible work options are employee driven, not when they are designed to meet the managements agenda.

According to study by Abid and Barech (2017) flexible working hours significantly impact employee performance and also help to improve work life balance. Another study was conducted in educational institutes of Peshawar, Pakistan; according to it time flexibility is the main factor that influences employee performance. The study revealed that in order to increase productivity, flexible time option should be given to employees (Hashim et al., 2017).

Another study supports those businesses with flexible work arrangement policies have higher employee performance. The same study also emphasizes that the employee performance is dependent on how flexible work policies are implemented (Stroup & Yoon, 2016). A recent research carried out in educational institutes of Karachi states that flexible work arrangements strongly influence job satisfaction (Aziz-Ur-Rehman & Siddiqui, 2019). Hence, it is hypothesized that:

H2a: There is a significant positive relation between Work Flexibility and Employee Performance during COVID-19

H2b: There is a significant positive impact of Work Flexibility on Employee Performance during COVID-19

2.3.3. Employee Cooperation and Employee Performance

Stankevičiūtė and Savanevičienė (2018) says that employee cooperation refers to good relationships of managers and employees, and team work. Keskinen (2017) defines workplace cooperation as the firm policies that focus on informing, consulting and including employees in business decision-making. The study also emphasizes that such policies help to reduce workplace

conflict and improve organizational performance. According to Hamlin (n.d) organizations where work is usually done in teams, the workplace cooperation is one of the major factors that affects the productivity of the employees. Another study by Hirsig et al. (2014) emphasizes that cooperation promotes job satisfaction, decreases the chances of workplace conflicts, results in lower absenteeism, and improves the quality and quantity of the work done. Similarly a study by Deery and Iverson (2005) concluded that cooperative labor management relationships contribute to higher productivity and improved customer service. Therefore it is hypothesized that:

H3a: There is a significant positive relation between Employee Cooperation and Employee Performance during COVID-19

H3b: There is a significant positive impact of Employee Cooperation on Employee Performance during COVID-19

2.3.4. Training and Employee Performance

Training can be defined as work-related education that aims to increase workers' skills and efficiency (Stimpson & Farquharson, 2002). Syed et al. (2020) defines training as a formal process of increasing the organization performance by improving the skills of the workers through different educational programs. While employee training focuses on increasing the work related education and skills of employees so that the current job can be performed better, development focuses on personal growth of employees, in other words the development focuses on future whereas training focuses on the present (DeCenzo & Robbins, 2010).

According to a research study, training and development enhances employees' skills and results in improved job performance and higher commitment towards the organization (Grossman & Salas, 2011). This is also supported by a recent study which states that training has a positive impact on organization productivity, and is mutually beneficial to the employee and the employer (Kusumawati & Wahyuni, 2019). Another research on training and development states that sustainable human resource practices like training and development are important to retain employees (Ibrahim & Rahman, 2017).

According to the 'Expectancy Theory' presented by Victor Vroom, employees will be encouraged to attend training if they expect that the training will have positive consequences for them; making the work easier for them and increasing their performance (Yin et al., 2009). Similarly Skinner's theory of reinforcement suggests that individuals are likely to repeat a behavior if positive outcome is attached to it, this suggests that training and development must be designed and organized on

these basis (Skinner, 2014). However Social learning theory states that learning can occur through instruction whether verbal or written, or through observation or imitation, and does not requires direct reinforcement (Ismail, 2017). These theories provide insight into how employees can be trained more effectively and efficiently.

Multitudes of studies have confirmed the positive relationship between training of employees, and employee performance. For instance Cabral and Dhar (2019) confirmed in their study that training can be used to positively influence the job performance. According to Ogbeibu et al. (2020) training has positive impact on team creativity as well. Similarly Malik et al. (2020) examined the relationship between training and development, and employee performance, and concluded that there is a positive relation between them. So therefore, it is hypothesized:

H4a: There is a significant positive relation between training and employee performance during COVID-19

H4b: There is a significant positive impact of training on employee performance during COVID-19

2.4. Role of COVID-19 and HR practice

WHO (World Health Organization) declared COVID-19 as a global pandemic on 11th March, 2020 (Ducharme, 2020). This health crisis disrupted the day to day life. Countries were pushed into country-wide lockdowns, national borders were closed, travelling was restricted, schools, businesses, government offices and recreational places were shutdown. COVID-19 can be blamed for one of the greatest workplace transformations (Koirala & Acharya, 2020). During the lockdowns, millions of people across the globe shifted to work-from-home model or teleworking, among them majority of people were those who had no previous experience in online working, moreover as the global economy slowed, millions of workers lost their jobs (Kniffin et al., 2020). This brought strategic challenges not only for employees, in the form stress, low productivity, burnout and work-life balance issues but also for human resource management, which have ultimately affected the employee performance.

A survey of 229 companies revealed that about 80% of the workers of 50% of these companies switched to work from home during the initial stages of COVID-19 pandemic (Gartner, 2020). Kniffin et al. (2020) pointed out that COVID-19 has compelled the businesses to formulate a new workplace model which includes; work from home, virtual teams and, leadership and management of virtual teams. A study by Koirala and Acharya (2020) noted that due to COVID-19, the HR

departments of the organizations had to shift their focus on activities such as; safety of employees, knowledge management, coordination and networking, capacity building and stress management in order to ensure smooth functioning of the organization.

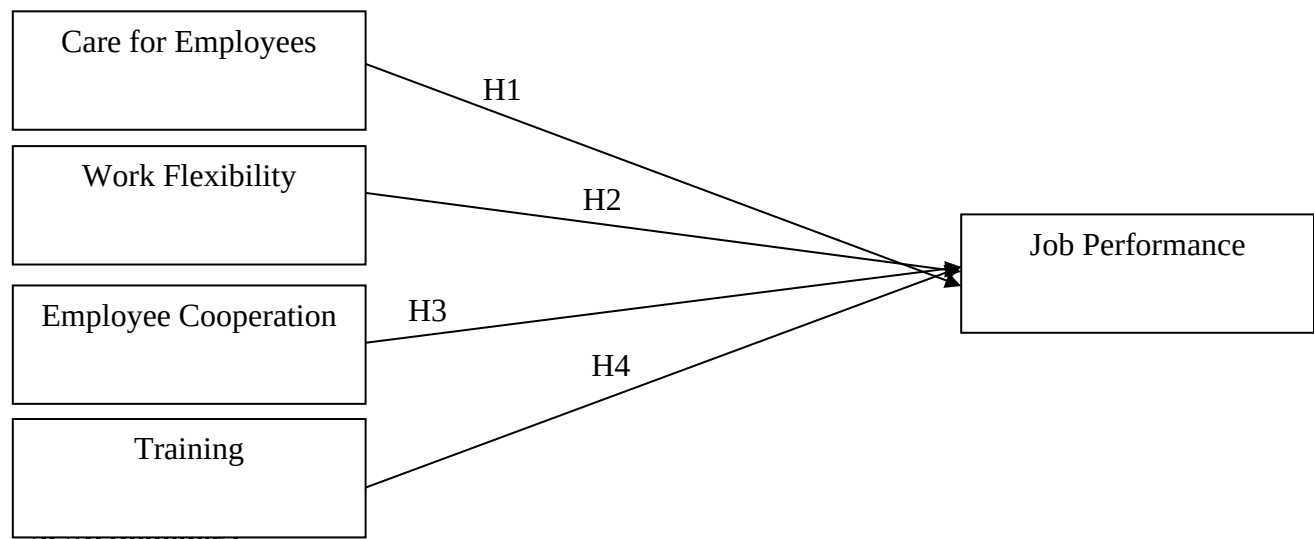
Unlike traditional HRM practices, sustainable HRM practices focus on well-being of employees and previous studies have shown positive relation between sustainable HR practices and the job performance. In this study, authors aim to investigate how during COVID-19 the sustainable HR practices have impacted the employee performance.

2.5. Conceptual/Theoretical Framework

This study is focused on examining the relationship between sustainable Human Resource Practices and Employee Performance, in the Banking sector of Sialkot, Pakistan. Thorough literature review has been used to construct the following conceptual model.

Figure 1

Conceptual model and hypotheses



This is an empirical study, quantitative in nature. This study aims to find the correlation between HRM practices and Employee performance, and the impact of Sustainable HRM practices on the employee performance during COVID-19, therefore the study can be classified as descriptive and causal. Survey research strategy was employed to collect the data by means of questionnaires. Interviews were not preferred because they are generally time consuming and expensive to conduct. Unit of Analysis for this study are individuals i.e. employees working at managerial positions in the banks of Sialkot, Pakistan. It is a cross-sectional study because data has only been collected once.

3.1. Sample Size and the Characteristics of the Sample

The target population for the study was the employees working at managerial positions in the Banking sector of Sialkot, Pakistan. However the total size of the population could not be determined because no information was available on the total number of bank branches in Sialkot, and the numbers of employees working in those branches, secondary sources of information were thoroughly checked to ensure this. Therefore to determine the total size of the population was not possible, so the population size in this study is classified as unknown. Furthermore considering the time constraints, and resources to access the banks, convenience sampling method was used and data was collected from 103 respondents. The respondents were categorized according to gender, age, education, work experience, and employment level or job status. The details of the demographics of the respondents have been given in the portion of descriptive statistics, **table 3**.

3.2. Data Collection and Data Analysis Procedures

The data for the research has been collected through questionnaire survey i.e. primary source of data collection. The scale to measure employee task performance was adopted from (Koopmans et al., 2014), the scale to measure employee care was adopted from (Hayes et al., 1998), the scale to measure work flexibility was adopted from (Bydén, 2017), the scale to measure employee cooperation was adopted from (Steffgen et al., 2015) and lastly to measure training, the scale was adopted from (Singh, 2004). There were a total of 28 questions in the questionnaire, excluding the questions relating to the demographics. The total number of questions including the demographics was 33. The numbers of items used to measure each variable have been given in detail, in Table 1.

Version 26 of SPSS (Statistical Package for Social Sciences) by IBM: Chicago, USA, was used for the purpose of data analysis. The reliability of the scales used to measure the variables, was determined through Cronbach's Alpha. Frequency tables were established for the demographics of the respondents and, mean and standard deviation was calculated for each variable. To test the hypotheses Pearson's Correlation Analysis was used, along with simple linear regression.

4. Results And Analysis

4.1. Reliability Analysis

As per (Pallant, 2007) the value of Cronbach's Alpha must be more than 0.7, for ensuring the reliability of the data. However if the number of the items in a scale is less than 10 then a

Cronbach's Alpha value of greater 0.5 is acceptable. The following **table 1** shows that the 6 scales used in this study meet the criteria.

Table 1

Reliability Statistics

Scale	No. of Items	Cronbach's Alpha
Employee Task Performance	7	0.875
Employee Care	10	0.941
Work Flexibility	3	0.685
Employee Cooperation	2	0.859
Employee Training	6	0.875

4.2. Descriptive Statistics

The total number of respondents was 103. The majority of the respondents were female, with a percentage of 58.3%. While majority of the respondents belonged to the age group of 20-25 and had working experience of 0-1 years. Moreover 44.7% of the respondents were working at junior level positions and 40.8% were working at middle level positions. Lastly 50.5% of the respondents were graduates, and 28.2% were postgraduates. The mean, standard deviation for the variables and other descriptive statistics are illustrated below, **table 2 and table 3**:

Table 2

Mean and Standard Deviation

Variables	Mean	Std. Dev.
Employee Performance	3.42	.982
Employee Care	3.35	1.04
Work Flexibility	2.80	.978
Employee Cooperation	3.85	1.07
Training	3.08	.957

Table 3

Category		Frequency	Percentage %
Gender	Male	41	39.8
	Female	60	58.3
	Other	2	1.9
Age	20-25	52	50.5
	26-36	42	40.8
	37-47	5	4.9
	48 or above	4	3.9
Education	Undergraduate	22	21.4
	Graduate	52	50.5
	Postgraduate	29	28.2
Work Experience	0-1	44	42.7
	2-3	27	26.2
	4-5	19	18.4
	6 or above	13	12.6
Employment Level	Junior	46	44.7
	Middle	42	40.8
	Senior	15	14.6

Total	103	100.0	<i>Respondents'</i> <i>Demographics</i>
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4.3. Correlation and Regression Analysis

Correlation analysis helps to determine the nature of relationship i.e. direction and strength between two variables. The correlation coefficient ranges between -1 and +1 (Investopedia, 2021). The closer is the value of correlation coefficient to absolute 1; the stronger is the relationship between the variables, whereas the negative and positive signs show the direction of the relationship. The correlation results (shown in **table 4 below**) reveal that there is a significant positive relationship between employee performance and employee care (where $r = 0.0672$ and p is less than 0.01), employee performance and work flexibility (where $r = 0.475$ and p is less than 0.01), employee performance and employee cooperation (where $r = 0.649$ and p is less than 0.01) and, employee performance and training (where $r = 0.568$ and p is less than 0.01). These results are in line with the hypotheses formulated above.

Table 4

Correlations

Variables	Employee Performance
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Employee Care:

Pearson Correlation (r)	0.672**
P-value (2-tailed)	.000

Work Flexibility:

Pearson Correlation (r)	0.475**
P-value (2-tailed)	.000

Employee Cooperation:

Pearson Correlation (r)	0.649**
P-value (2-tailed)	.000

Training:

Pearson Correlation (r) 0.568**

P-value .000

** . Correlation is significant at the 0.01 level (2-tailed)

Simple linear regression has been used to measure the impact of Sustainable HR practices, the independent variables; Employee Care, Work Flexibility, Employee Cooperation and Training, one by one on Employee Performance i.e. the dependent variable. The findings of the simple linear regression are shown in the **table 5** below. The table demonstrates that there is a significant positive impact of, care for employees, on employee performance (where p is less than 0.05 p, B = 0.0672, R-Square = .452). The value of beta is positive, therefore showing positive relationship between care for employee and employee performance, the value of p is below 0.05 which suggests that our results are significant and the value of R-square shows that 45.2% of the variation in dependent variable i.e. employee performance is caused by the independent variable. The results also show that there is a significant positive impact of work flexibility, on employee performance (where p is less than 0.05, B = 0.475, R-Square = .226). The positive value of beta indicates that there is a positive relationship between work flexibility and employee performance, value of p is less than 0.05, this indicates that our results are significant and the value of R-square indicates that 22.6% of the variation in employee performance is explained by work flexibility.

Similarly the results show that there is a significant positive impact of employee cooperation, on employee performance (where p is less than 0.05, B = 0.649 R-Square =.421). The value of beta is positive therefore showing positive relationship between both the variables, the value of p is less than 0.05 thus indicating statistical significance of the results, and lastly the value of R-square indicates that 42.1% of the variation in employee performance i.e. the dependent variable, is caused by employee cooperation i.e. the independent variable. The table also shows that there is a significant positive impact of training, on employee performance (where p is less than 0.05, B = 0.568, R-Square =.323). The value beta is positive thus indicating positive relationship between both the variables, the value of p is less than 0.05 which indicates statistical significance of the

results and lastly the value of R-square indicates that the variation of 32.3% in the dependent variable i.e. employee performance is explained by the independent variable i.e. training. Moreover the t-values are greater than 2, for all the variables which further testify the statistical significance of the results. Therefore based on the findings of correlation analysis and simple linear regression analysis, the results support all 8 hypotheses of this study.

Table 5

Regression Analysis Results

Variables	Employee Performance			
	Standardized Beta	R-Square	T-Value	P-Value
Employee Care	0.672	.452	9.13	.000
Work Flexibility	0.475	.226	5.43	.000
Employee Cooperation	0.649	.421	8.58	.000
Training	0.568	.323	6.94	.000

Dependent variable: employee performance. Independent variables: employee care, work flexibility, employee cooperation, training; $p < 005$ is significant.

5. Discussion

The emphasis of this study was on sustainability in human resource management strategies (employee well-being, job flexibility, collaboration, and training). According to the findings of this study, sustainable human resource strategies have a positive influence on employee performance. This study contributes to the corpus of knowledge in long-term human resource management. By demonstrating how this impacts employee performance, we get a better grasp of the subject. Because it has a direct influence on employee performance and hence business success, sustainable human resource management has become an essential topic for firms, HR managers, researchers, and practitioners all over the world. The study's results indicate a correlation between long-term approaches to human resource management and greater levels of employee productivity.

Using a simple linear regression model, we discovered that sustainable human resource strategies improved employee performance. Both analyses yielded statistically significant findings. It has therefore made a significant contribution to HRM literature in Pakistan by investigating this link in the context of Sialkot's banking industry during COVID-19 in Pakistan's banking sector.

According to the findings of the current study, worker care has a positive influence on employee performance (Anitha, 2014). The results of this research back with ours, which discovered a link between employee performance and work flexibility (Abid & Barech, 2017). Furthermore, a study by confirms our finding that training boosts employee performance (Kusumawati & Wahyuni, 2019). Finally, our study showed a significant positive association between employee cooperation and employee performance, which was verified by an examination of employee performance. (2014) (Hirsig et al.).

Although several studies on the impact of sustainable HRM practices on work performance have been conducted in Pakistan, many sectors and cities in Pakistan remain undeveloped in this field of study. Researchers were able to get a better understanding of how these elements interacted during a global pandemic by studying an undiscovered city and sector. Because these aspects have a positive association with employee performance, it is feasible to improve job performance by using sustainable human resource management approaches. People are a company's most precious asset, whether it is public or private. People are the lifeblood of businesses. For example, technology has transformed the way labor is performed, and when businesses change and confront new challenges such as global pandemics or other concerns, sustainable human resource management may give a feasible answer. The time has come for companies to embrace a more sustainable approach.

The researchers aimed to evaluate how sustainable human resource management techniques influenced employee performance on COVID-19. The banking business in Sialkot, Pakistan, in particular, was selected because it is home to a significant number of highly qualified and specialized people, making it an appropriate sector for our study. A huge number of journal and online publications were examined in order to perform this investigation. A questionnaire was then prepared in order to conduct a survey. Our results show a robust relationship between long-term human resource management practices and greater levels of employee productivity. Several more

research have found the same thing. Because sustainability is presently understudied in Pakistan, this study adds to the body of knowledge on sustainable human resource management. Human resource management at COVID-19 may be improved by using long-term HR strategies.

5.1 Managerial Implications

Organizations must embrace features of Sustainable HRM such as employee care, work flexibility, employee collaboration, and training in order to improve employee performance. Employee productivity may be increased by implementing long-term human resource initiatives, according to this study.

Managers must focus on their employees' health and safety in order to maintain a healthy and productive workforce. Reduce conflict and increase productivity by building a mutually beneficial relationship between employees and management via participatory decision-making, consultation, and education. Flexible working hours and 'work-from-home' choices may also aid workers in maintaining a good work-life balance, therefore managers should allow employees to create their own schedules and pick how many and what kind of working hours they have. As a consequence of this improvement, employee productivity and loyalty will both increase (Choo et al., 2016). Managers must pay attention to employee training as well. These initiatives not only encourage business success via improved employee performance, but they also help people grow personally.

People are more inclined to help an organization flourish if they perceive the company is caring for them, establishing a cooperative work atmosphere, offering schedule alternatives, and providing educational opportunities for them. A global pandemic, such as the one caused by the COVID virus, emphasizes the need of using long-term human resource management practices, such as employee care, workplace flexibility, collaboration, and training, to keep workers engaged and productive.

These long-term HRM components enabled the Sialkot banks to make a smooth transition to new ways of doing business. The superb COVID-19 safety procedures put in place by management helped employees feel safe and comfortable at work. Second, employees were allowed to do

their job according to their own schedules and conveniences throughout the outbreak, which was a time of great uncertainty. As COVID-19 introduced new challenges to businesses in the form of

virtual teams, monitoring employee performance, and working from home, firms needed excellent employee cooperation to provide inventive and timely solutions. Because most workers had little previous experience to the internet or remote work, training became more crucial as organizations implemented new working patterns.

This means that during COVID-19, it is feasible to enhance employee performance by preserving workers' health and safety, offering flexible work hours, and fostering collaboration among them.

5.2 Conclusions and Suggestions for Future Research

This is the first time in Sialkot that a quantitative study has been done in the context of sustainable human resource management. An exhaustive review of academic publications, research papers, and articles was undertaken in tandem with a survey to investigate the relationship between employee performance and long-term human resource management.

Nonetheless, since this is the first study in Sialkot, it has a few shortcomings that may be rectified in future investigations. Because of the COVID-19 epidemic, which made it impossible to visit numerous banks, there were only 103 participants in this research. This indicates that larger sample sizes may be used in future investigations. There are many other components of sustainable human resource management that may be taken into account to examine how they effect employee performance, such as employee empowerment, in the future. It would be intriguing to compare normal HR approaches with Sustainable HR practices and observe how they effect employee performance. As a result, the conclusions of this study cannot be extended to other industries in Sialkot. The results and application of the study may be evaluated in other industries and sectors of the city in future studies.

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Influence of social media tools on the performance of small and medium enterprises: An empirical analysis

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Abstract

The topic of this research is “Impact of social media on small and medium businesses”. The purpose of this research is to study the impact of social media SME’s. To carry out this research, primary data was collected by floating questionnaires. A sample of 300 questionnaires were floated among different SME’s which are using social media as a marketing tool in their businesses. The finding suggested that the social media has a significant impact on the way SME’s function. It was shown that how social media enable small firms to learn to develop social media competence. The software used was SPSS to analyze the data for frequencies regression parameters and the results were interpreted by the usual principles of statistics.

Keywords: Social Media; SMEs; Marketing

1. Introduction

As the IT development took the world by a storm, the lifestyle of many people and businesses has changed considerable. The world has transformed into a small town because of fast and reliable communication channels. At this point new occurrences of social media happened which right away got success. Social media channels like Facebook, blogs, twitter and more gave small and medium businesses a new path to operate. With the development and improvement in social media this turned to a turning point in businesses on how they operated and market. It changed the way in which how firms used to connect with its current and potential customers. Numerous firms have moved to social media for advertising and operations. These Facebook pages are now used to draw in new customers and search for new business openings. Most firms to do because of the idea that social media enables businesses to interact with current and potential customers, and target market 24/7. Web 2.0, which is very popular nowadays, can be characterized as user generated content available online.

Businesses use web 2.0 at operations level to make better relationships with customers, which then increases product image and brand reputation which then leads to a greater benefit of increased business value. Firms which have a strong online presence communicate with their customer responses and comments on Facebook pages very often and critically to further get a understanding of what the consumer expects and need, and to further improve their business by reducing customer complaints. For firms to achieve social media competence they need to focus on some critical points to gain social media capabilities which will help them to counter on their competitors and capture more markets. Social media is recent phenomena which have spread out very quickly affecting all the races of life. It has created a major change in how the businesses operate. To start out on social media and create an online presence with thousands or millions of followers is not

an easy task especially for small businesses that have the restrictions of limited capital and human expertise. However with all these restrictions, there are very good examples of small sized businesses that have a really good online presence of Facebook which has proved to be very beneficial for them in terms of revenues and increased customers. There are also some businesses that thrive on social media as the only medium for marketing. In spite of the fact that the use of internet does not have any costs but still it involves usage of other resources. This will be a significant study because social media is the most growing phenomena. So, it is important how small businesses in Pakistan are benefiting from social media.

1.2 Global Context

According to (Mahr & Lievens, 2012), More than 80% businesses use social media platform for marketing and operating purposes. This shows that globally it has become more of a necessity for firms to use social media otherwise they will be kicked out of the competition. Companies have now progressed from just having a Facebook page to a newer version of marketing in which they conduct lucky draws and other contests online to attract online followers and customers. They conduct free giveaways for online followers which results in brand engagement.

1.3 Pakistani Context

Pakistan saw its social media traffic grow at a very fast pace due to development of internet channels and provision of 3g and 4g. Approximately Pakistan had more than 4 million Facebook users and it has the fastest growing social media population. Today many Pakistani firms are using social media for promotion and other aspects. Social media advertising can be defined as refers to the process of gaining traffic or attention through social media sites. This characteristic of social media marketing is very common for particularly small firms who use the advantage of free social media which saves them a lot of costs as compared to traditional mediums of marketing. Bundu Khan is a popular restaurant chain in Pakistan which gained a lot of popularity after it started to conduct lucky draws on Facebook and giveaway exciting prizes, in result it experienced an increase in its Facebook followers to millions. Another interesting example is of a fast food restaurant, Johnny and jugnu, which is a small sized business, but it has a very good Facebook presence and does most of its marketing on Facebook.

Research Question

What is the impact of social media on small and medium businesses?

2. Literature Review

2.1 Social Media Competence

According to (Schreck and Keim (2013: 69)) social media can be broadly characterized as all media formats by which people interact to share information in multiple kinds of processes. Businesses are working to make their social media presence especially in the new form of social media in which Web 2.0 is introduced. Web 2.0 provides a whole new face to internet in which new applications such as Facebook, twitter, Instagram, and blogger have been introduced. These applications allow the users to produce content and this has altered the way of online connections, how consumers get information regarding products, and what kind of promotions are implemented

(Constantinides & Fountain, 2008). As social media is considered now as a vital marketing tool, business organizations are using it to interact directly with consumers at the correct time at lower cost and more efficiency than traditional media tools. This characteristic of social media has attracted not only big firms but also small and medium enterprises to invest in social media marketing (Kaplan & Haenlein, 2010). The studies show that businesses use social media for a variety of uses such as marketing (Gummerus, Liljander, Weman, & Pihlström, 2012; Michaelidou et al., 2011) to attracting new customers (Fischer & Reuber, 2011) especially searching and buying tactics (Hennig-Thurau et al., 2010). Another plus point for these web-based applications are that they are an genuine tool for accessing authentic and updated information (Sigala, 2012). The popular use of social media applications enables the users to share and learn online (Hur, Kim, Karatepe, & Lee, 2017). However, the main task for these firms is not only to do social media marketing but also to make it affective and translate it into revenue and profits. Businesses find it difficult to turn online communication with consumers in the shape of online interaction increased sales and revenues (Mitic & Kapoulas, 2012). As well as increased brand awareness and revenues due to the effective use of social media (Michaelidou et al., 2011). Studies show that there has been a difficulty in determining the effectiveness of investments in social media, assessed in terms of ROI (Wu, 2016; Kim et al., 2015; Chung et al., 2013; Kumar and Mirchandani, 2012), because there are no clear differences between customers from online pages and normal customers. Businesses use social media applications for example Facebook, for increasing awareness of the brand and engaging customers through online like, comments (Wallace et al., 2014).

2.2 IT Infrastructure Capability

IT infrastructure can be defined as series of joint technological and human resources in the businesses that enables them to use different IT apps (Suh, Van Hillegersberg, Choi, & Chung, 2013; Weill). It includes some of the simplest communications such as fast speed internet which is very essential to enable the use of technology (El-Gohary, 2012). IT infrastructure capability can be used as a vital tool for firms to get better at social media. This infrastructure is divided into two broad sections: First, the firm's technological devices such as computers and internet modems are the bases to social media and get social media capability through hardwork (Crossan et al., 2011). Secondly, human resources can enable the business to employ social media with the company's IT tools to give reliable and to the point data which will enable important users to make decisions (Miro, 2014). The depth of a firm's IT infrastructure capability can be assessed by checking its use of many IT software to provide up to date, authentic, safe and personal data to important users (Bharadwaj, 2000; Sambamurthy, 2011; Pavlou, 2006) The influence of technology in the new world is constantly increasing at a very fast speed. Past data displays users have become more interrelated in internet; however, there are some worries about authenticity and safety of technology keeping in mind the investment done (Stockdale and Standing, 2006). Finally, it is very important for the firm to employ its IT technology in such a way that the perfect combination of its technology and HR tools enables it to generate and distribute new content between the involved parties (Trivedi, 2005).

2.3 Marketing Management

Social media can prove to be a very good marketing tool in today's world. To fully benefit from this tool firms, need to employ proper marketing management to implement it. This plan will facilitate the companies to achieve social media capability. In the study of (Kirtis and Karahan

(2011)) it was concluded that marketing through internet is a cost-effective marketing strategy for businesses because it is a tool which can reduce expenditures and millions of customers can be accessed in a quick span of time. Active firms in the market adopt social media earlier than their competition in order to target and interact with their customers, which allows these companies to get social media ability much more quickly than their competition (Lee et al., 2013). In today's world, successful companies with better marketing management capacity have combined their traditional marketing ways like TV with the internet like Facebook (Luo, Fan, & Zhang, 2012). Social media advertising is now considered as a separate branch in marketing. Social media managers are given more tasks on social media in advanced companies (Kironet al., 2012) who are given the function of mainly designing, updating and maintaining the content of the business (Kane et al., 2014). An interesting pattern seen nowadays is that small scale businesses that adopt to IT have upper management which is more open and innovative towards adopting technology (Thong and Yap, 1995). Entrepreneurs who have better information about new technologies can persuade their counterparts to include it in their everyday operations. Entrepreneurs who are innovative tend to encourage e-commerce in their firms (Tarafdar and Vaidya, 2006). In SMEs, social media marketing is guided by the top administration who takes all the decisions regarding the business. (Nguyen, 2009).

2.4 Innovation Management

Innovation management is a process in which managers use and cooperate their available resources to innovate. Innovation management can prove to be an essential factor by which businesses develop a social media capability. Firms who promote innovation develop, share and use new content, ideas to achieve productivity in a better way than traditional firms (Real et al., 2014). Applying these innovative ideas on social media is a crucial step for firms. Innovative firms try to experiment different ways to generate new ideas which can help in social media practices and also absorb customers responses on new products (Kiron et al., 2012), which can help firms to get better social media capabilities by the use of better knowledge (Real et al., 2014) and to take part in the R&D of the company (Wasko, & Hooker, 2010). The characteristics of successful innovative firms are that they tend to have more innovative management, who use new advanced technologies in an open and carefree way (Nambisan, Agarwal, & Tanniru, 1999). In this study example of an IT giant, Dell, is given which successfully tried to make its presence on internet by making an online platform. Another example of a big firm employing innovative marketing strategy in social media is of Gillette who introduced a competition in which users made videos showcasing their freestyling skills in sports like football and later these videos were posted on internet. So the users were able to participate in the initiative taken by the company Gillette (Mangold, W. G. & Faulds, D. J. 2009). Another innovation seen in this aspect is done by American express which allows users to login on to Facebook and enjoy different deals and prizes (Piskorsky, M. J. & Chen, D. 2012).

2.5 Firm Size

According to the previous done studies there are complicating results on whether firm size matter in attaining social media competence. Some studies suggest that big size of firms do matter a lot when it comes to successfully use social media. In the study of Sinclair and Vogus (2011), it was concluded that big businesses are more likely to invest in and employ social media due to their

vast resources and ability to invest in different type of alternative media for marketing at the same time. Big businesses have much more resources, so they create more social media capabilities much quicker than other firms so this suggests that firm size have a positive relation on social media usage by the company (Sinclair & Vogus, 2011). Some of the biggest firms of the world have successfully employed social media marketing technique. Starbucks introduced discount coupons only for its Facebook followers which resulted in 6 million new customers in 2010 (Deighton, J. and Kornfeld, L. 2011). However, some researchers think that small size proves to be an advantage when it comes to social media marketing. This is mainly because SME's are more enthusiastic in adapting to advanced social media trends due to their flexible business patterns (Daniel & Grimshaw, 2002; Zhu & Kraemer, 2005). There are certain proofs that small firms can also employ successful social media advertising campaigns. A small ice-cream maker from India, Hokey Pokey, with a limited marketing budget used internet to spread its brand name. It followed an aggressive social media campaign in 2009 for marketing activities. It turned out to be a successful marketing campaign as it improved its image of the business and profits (Kumar & Mirchandani, 2012). So, it can be concluded that SME's have limited resources as compared to their competition (Daniel & Grimshaw, 2002).

Research hypothesis

H₁: There is a positive relationship between marketing management and social media competence.

H₂: There is a positive relationship between IT infrastructure capability and social media competence.

H₃: There is a positive relationship between innovation management and social media competence.

H₄: There is a negative relationship between firm size and social media competence.

3. Methodology

This research is being conducted to see what effect social media has on SMEs. Mostly qualitative variables were used for this research, but statistical techniques were used for quantification of those variables. The research is being conducted entirely on primary research which was collected through questionnaires through google forms. The period of collection was from February 2020 to March 2020. Sample size of the data was 300 respondents. They were using social media as their marketing tool. They were mostly start-ups operating through Facebook and Instagram.

Table 1

Instrument Description

Variable	Creators	Year	No. Of Items
Social media competence	Pezderka et al.	2012	5
Marketing Management	Papastathopoulou & Avlonitis	2009	5

IT infrastructure capability	Chung	2013	2
	Derowier,	2003	2
Innovation Management	Lin, Peng, & Kao	2008	3
	AM Shaltonu	2017	2
Firm size	Sanghyun Kim,	2012	4
	Hyunsun Park		

3.1 Techniques

Path analysis was used to carry out this research. Path analysis was used to describe the degree to which the variables depend upon each other, using models like multiple regression analysis, CFA and discriminant analysis. To measure the consistency of the researcher's understanding a Confirmatory Factor Analysis was used.

3.2 Data Analysis

The software used for this research were SPSS and AMOS. They were used to see how the variables were correlated.

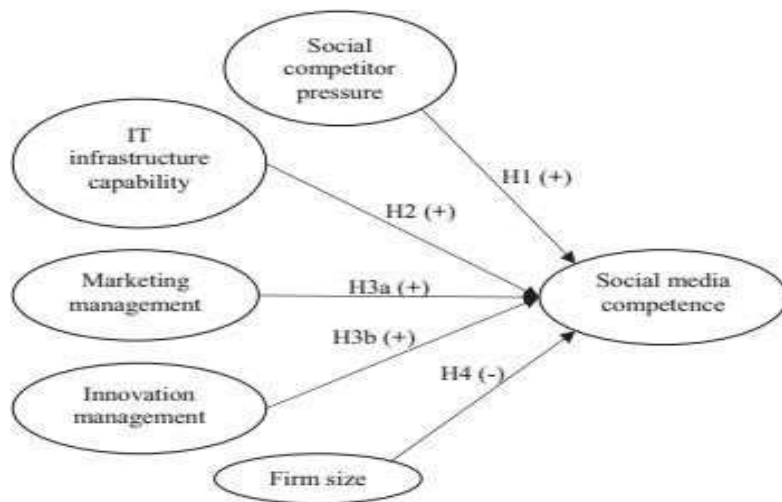


Fig.1. Hypothetical Framework

4. Analysis and Results

The results chapter of the research paper is divided into two parts. Firstly, the data collected is analyzed. The analysis includes the experimentation of measurement model which is being checked through the use of CFA (confirmatory analysis). Furthermore, this method also includes individual reliability of the items. Also, Cronbach alpha was used to check the reliability of the constructs. Individual AVE's and discriminant validity among variables are also analyzed.

Software used for this purpose were IBM SPSS 20 and Amos Graphics. Later, individual hypothesis were tested after analyzing the structural equation model.

4.1 Demographics

The data for this research was collected from 300 small and medium businesses who have implemented social media in their businesses. Among 300 respondents, 64% of them were males while 36% were females. About (37%) of the respondents were aged between 18-25 while (31.8%) were aged between 26- 35 and (11%) were aged in the age group of 36-45 while the remaining (20%) were above the age of 45. About (31.8%) of the respondents had monthly income Rs. 50,000 – 100,000 while (24.2%) had income in the rage of Rs. 100,000-150.000 , (44%) of respondents earned Rs 150,000 – 200,000 and above. When asked which social media do they use, (64%) said they use Facebook, (29%) used Instagram, (5%) used a website while (3%) used emails.

Table 2

Sample Profile

Demographics	Categories	Percent
Gender	Female	36
	Male	64
Age	18-25	37
	26-35	31.8
	36-45	11
	Above 45	20
Income	50000 - 100000	31.8
	100000 - 150000	24.2
	150000 – 200000	44
	and above	
Which social media do you use?	Facebook	43
	Instagram	19
	Website	3
	Email	1

4.2 Reliability Analysis

Cronbach alpha coefficient was used to assess reliability of the measures (Straub, 1989). Cronbach Alpha was developed by Lee Cronbach to measure the internal consistency of the instrument. Acceptable value of Cronbach's value can vary between 0.5 and 0.95 as pointed by Pearson (1994). The overall Cronbach Alpha was 0.692. The individual score lies between 0.502 for IT infrastructure capability to 0.793 for firm size.

Table 3

Reliability Analysis

Dependent variable	Independent variables	No. of items	Cronbach Alpha
Social media competence	IT infrastructure capability Innovation management Firm size Marketing management	18	0.692

Table 4

Individual Cronbach

Variable	No. of items	Cronbach Alpha
Social media competence	4	0.551
IT infrastructure capability	2	0.502
Innovation management	3	0.688
Firm size	4	0.793
Marketing management	4	0.602

4.3 Measurement Model

Factor loadings are the correlations of the variables with the factor. The benchmark for factor loads is 0.4 or higher as suggested by (Hair et al., 1996). The range lies between 0.438 and 0.749. The items which were deleted were SMC3, IT2, IT3, IM2 and MM3. Convergent validity measures the agreement among multiple items measuring the same construct as showed by Fornell and Larcker

(1981). The benchmark for Convergent Validity is 0.5 or above as suggested by (Hildebrandt 1987). The reliability was measured with the values of Cronbach's Alpha and composite reliability by (Hair et al.,2010). The values of CR should be greater than 0.5 as stated (Fornell & Larcker, 2010). The range lies within 0.520 and 0.814. The AVE scores were used to describe the average variance for each measuring construct. The benchmark is greater than 0.5 as showed by (Escobar et al. 2015). The range lies within 0.24 and 0.52

Table 5

Discriminant validity

Variable	AVE	COV ²	
SMC	0.26	0.101761, 0.086436, 0.086436, 0.200704, 0.2926	Does not Holds
IT	0.25	0.101761, 0.084681, 1.1881, 0.0441	Does not Holds
IM	0.406	0.086436, 1.1881, 0.051984, 1.008016	Does not Holds
FS	0.523	0.200704, 0.051984, 0.084681, 0.100489	Holds
MM	0.3	0.292681, 0.0441, 1.008016 , 0.100489	Does Not Holds

Detailed analysis was done for each variable in this model in which criteria for judgement was to hold the DV if AVE is greater than the square of the covariances of the variables and if AVE is lower than the square of the covariance then DV does not hold.

Table 6

Confirmatory Factor Analysis

Variable	Factor Loading	AVE	Construct reliability
Social media competence	0.473,0.493,0.519,0.474	0.260	0.557
IT infrastructure capability	0.556,0.438	0.250	0.520
Innovation management	0.678,0.630,0.600	0.406	0.671
Firm size	0.754,0.749,0.685,0.701	0.523	0.814

Marketing management	0.548,0.618,0.540,0.477	0.300	0.630
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4.1 Structural Equation

R-square is a method used to check of where the data lies near to the fitted regression line. Another version of R-square is Adjusted R-square that is presented after been adjusted for the number of predictors in the model. Adjusted R Square usually give lesser value than R square. In order to get acceptance of the model the value in Sig. (ANOVA) should be less than the 0.05. The acceptance of each variable was taken from the estimates of path analysis. Due to this, p-value was considered for the acceptance or rejection. The p- value in the form of (***) means .000 and implies that independent variable is perfectly positive significant with dependent variable.

Table 7

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542 ^a	.293	.264	.35780

Table 8

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.050	4	1.262	9.861	.000 ^b
	Residual	12.162	95	.128		
	Total	17.212	99			

Table 9

Path Analysis

			Estimate	S.E.	C.R.	P	Label
SMC	<---	IT	.086	.049	1.739	.082	

SMC	<---	IM	.083	.078	1.063	.288
SMC	<---	FS	-.137	.046	-3.000	.003
SMC	<---	MM	.349	.071	4.888	***

4.2 Regression Equation

Social media competence= 2.559 + 0.086 IT infrastructure capability + 0.83 Innovation management -0.137 Firm size + 0.349 Marketing management. Keeping all other variables constant, 1 unit change in IT infrastructure capability will result in 0.086 unit change in dependent variable, Keeping all other variables constant, 1 unit change in Innovation management will result in 0.83 unit change in dependent variable, keeping all other variables constant, 1 unit change in Firm size will result in 0.137 unit decrease in dependent variable, Keeping all other variables constant, 1 unit change in marketing management will result in 0.349 unit change in dependent variable. In order to statistically test the hypothesis of a research, multiple regressions was used to investigate the relationship of IT capability, Innovation management, Firm size and Marketing management with Social media competence.

The hypothesis testing is being shown below.

H1. There is a positive relationship between marketing management and social media competence. As p- value shows the result of perfectly significant, H1 is accepted

H2. There is a positive relationship between IT infrastructure capability and social media competence. As p-value is more than 0.05, H2 is rejected

H3. There is a positive relationship between innovation management and social media competence. As p-value is more than 0.05, H2 is rejected

H4. There is a negative relationship between firm size and social media competence. As p-value lies in the limits of 0.05, H4 is accepted

5. Discussion and Conclusion

The main purpose of this testing was to determine how small and medium businesses can employ social media in their business. By this testing we can see what variables affect social media usage by SME's directly and while others which do not have a direct affect. Our H1 Marketing management was found to have a perfectly positive relationship with social media competence Using social media as a tool for marketing can enable companies to achieve social media competence. Small startups that only work through Facebook and Instagram pages have very limited resources so social media marketing is he only marketing tool they have due to obvious cost advantage over conventional marketing tools. Active firms in the market use internet marketing to pull their possible customers and keep in touch with current customers on social media sites (Lee et al., 2013). In the study of (Kirtis and Karahan (2011)) it was concluded that using social media for marketing is a cost-effective marketing strategy for organizations because it can save business costs as social media has a reach of millions of consumers. H2 of this study IT infrastructure capability was rejected as it was seen that it does not have a clear effect on the social media's usage by SME's. It is not compulsory for SME's to have an IT capacity to excel in online marketing. IT infrastructure can be defined as a mix of human and technological tools which

are used by businesses for various purposes (Jukic, Jukic, & Velasco, 2009). It can be viewed that having the latest technology and newer models of computers doesn't always translate in businesses achieving social media competence. It is really vital for the company to employ its IT technology in such a way that the perfect mixture of human and technological resources enables it to use social media in such a way which will benefit the business (Tanriverdi, 2005). The third hypothesis of this study, innovation management, is rejected. Businesses which are advanced in the advertising adopt social media in less time and build up a social media capability which is then used to capture opportunities.

Innovative firms try to experiment different ways to make new ideas which will help in social media practices and also absorb customer's ideas on new products (Kiron et al., 2012). However, being innovative alone does not guarantee social media success. H4: Firm size is accepted as it has a negative relationship with social media competence. SME's are more enthusiastic in innovating and engaging in new social media trends due to their flexible management and size and less complications in hierarchy (Daniel & Grimshaw, 2002; Zhu & Kraemer, 2005). Having a small size means that there are less hierarchical complexes which can result into efficiency in the firm. Small firms have limited resources so they can opt for this kind of marketing to achieve maximum benefits at a low cost (Zhu et al., 2006).

5.1 Managerial Implications

This research is an effort to see how SME's can employ social media in their businesses. Small SME's can implement social media in such a way which maximizes business gains. This research shows how SME's can develop a social media which will have a significant impact on revenues and profits. Also it is shown that what practices the SME's should perform to excel in social media marketing. The main benefit of social media is that is really inexpensive as compared to other methods of marketing. So small firms, with limited resources, should fully gain the benefits of social media marketing.

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The Effect of social media on Academic Performance of Students with Mediating role of Student's Satisfaction in Pakistan

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Abstract

The main aim of this study is to investigate the influence of social media on academic performance of students with the satisfaction of the student as mediating role. Social networking is an integral part of our time- and place-constricting life, creating new alliances and maintaining old ones on a global level not even on an individual level. The Internet has been revolutionizing human life. The technology of the internet and communicate has created crucial gaps in our lives and has fractured the planet as near as global city has. Data was obtained from 299 students using sampling technique for convenience of non-probability. This study's theoretical structure, focused on literature and two factor theory. Analyzing the data used by Smart PLS and results from this study elucidates that social media has encouraging impact on student success, and the happiness of students positively mediates the association between social media and student academic performance. Social media have increased and created societal social, educational, and awareness. Social media has created a way to access knowledge in many areas of everyday life.

Keywords: social media (SM), student's satisfaction(SS), students' academic performance (SP)

1. Introduction

Student retention is critical to achieve the primary objectives of training and graduating students but also from the viewpoint of managing college enrollment. Student retention who is already enrolling in a scheduled college is likely to be less expensive than recruiting a new student. Social schmoozing has been one of the strongest means of communiqué in modern times. Social interacting has internet linked millions of people to each other. Social networking offers a wide variety of websites for linked people like Facebook, Twitter, and YouTube, and students spend their entire time using them (Asur & Huberman, 2017; Karpinski, Kirschner, Ozer, Mellott, &

Ochwo, 2013). The way of communication is continuously evolving and as such it is problematic to assign it a stationary definition as (Scott & Jacka, 2011). Research found that the argument that defines the meaning of social media is not well-recognized. But in the last few years, some researcher described it differently. According to Kaplan (2010), the internet social networking community has developed a framework that shapes Web 2.0 's conceptual and technological practicalities in addition to countering user-produced content creation and conversation. It is also distinguished from another position as "websites and applications for social networking." It is a very prevalent, incredibly fast and wide-ranging communiqué network that has proven itself to be extremely operational, as well as reliable by billions of individuals, to segment and evaluate gratified people, brands, facts, entertainment and know-how "(Dearborn, 2014). It also includes the different means of communication between people all over the world.

Social networking started with the first recorded social interface in the early 1990s, which in 1997 was called Six Degrees, enabling individuals to upload their side views and create their networks in an easy way. Since media started in 2001, some online platforms promoting different combinations of ads and profile articulate friends such as Asian Avenue, MiGente, and blackplanet provide these platforms (Boyd, 2007). Over time, there has been enormous growth and today 6 social networking sites for local or international personal or general use, such as the first project known as Wikipedia, second micro blogs and blogs known as twitter, third material communication known as YouTube, fourth social networking sites known as Facebook, BB talk, fifth virtual games known as the world Development technology supports social media firmest growing web application in 21 century and rapid expansion (Al-Tarawneh, 2014). Social networking today, with the advent of smart phones that also support social networks, has occupied a lot of creative magnitudes and invigorated contributors. Using mobile phones powered by Android apps to societal network is devoted to as Cell Social Interacting. Societal system structures have now moved from the device to the 7 mobile phones, and network knowledge and statement can be incorporated into the public interplanetary; and these new tools designed for mobile phones enable users to establish, improve and reinforce their social links.

Social networking also offers people-to - people contact regardless of detachment, making it easy for people to exchange information, files and photos and videos, generate blogs and send messages, and conduct real-time conversations. These structures are called social, purely because they make

it easy and efficient to communicate with buddies and colleagues. It also strengthens interpersonal conations within such structures. Facebook, Twitter, and others are the country's favorite Internet websites. These blogs and social fora are a way to communicate directly online and through the media with other people. They play an important and influential role in economically, politically, socially, and educationally taking decisions from the global world on occasions. The dynamic factors behind schedule social media implementation are the democratic ubiquity of social media access, ease, accessibility and mobility (C. H. Brown, 2010; Schroeder, Minocha, & Schneider, 2010).

Poorly qualified social technologies have been argued to encourage social-constructivist approaches in order to learn that they would need to improve student understanding and engagement among students. Another advantage of social technologies offered on the Internet is that they are either free or require minimal investment, removing a possible barrier to adoption (Brown, 2010). Various overviews and opinions have been provided in higher education that have established four major benefits of using social media. These include enhancing partnerships, the learning engagement, providing customized training content and developing teamwork skills. This means that social networking activities have the potential to enhance student engagement, and are used to enhance student involvement in the class, particularly when engaging in introverted students. Students can work in online group learning, with little to no anxiety about raising questions before school peers (Bhatti, Shaheen, Kamal, & Ali, 2020). There are a variety of places for students like LinkedIn to support. Lots of students, teachers and academics make use of this forum for academic purposes.

The total amount of time expended online was between four separate online resources, comprising porches, social schmoozing, web-based email, and groups of entertaining for TV and composition gratified, video sites, and entertaining news (Maqableh et al., 2015). The largest proportion of the online networking population was represented by students from universities. In addition, with the proliferation of social media, many professors are beginning to use media in their lectures, class discussions, and project collaboration to increase learning outcomes and enhance communication with and among students. However, some recent research has shown that exposure to social media by students may have a major impact on academic achievement (Paul, Baker, & Cochran, 2012). Many researchers investigate the effect of the students' fast and heavy communication technologies on their academic performance (Junco, 2015).

Therefore, if students have supplementary self-regulations besides well time managing skills, they may have superior control above use. A research collection recommended that if more theoretical staff certainly knew how to integrate them into their syllabuses, online social systems might hypothetically be seen as a treasured informative tool. They accessible an investigation model which describes the key issues, straight and subsidiary, that distress students ' academic performance, particularly the influence of the stretch expended on social media. The model proposes that academic accomplishment for students is the produce of historical of consideration, time management skills, student attributes, learning abilities and time spent on online social networks. Social networking plays a significant role in academic growth, as well as all social sciences and education systems. Many research has examined various aspects of using social networking across multiple academic and social levels. Open literature on social media offers valuable information on its use in higher education institutions (Hamid, Waycott, Chang, & Kurnia, 2011). Academics can use social media in a number of ways, as Facebook was proposed as a way to get together with students (Mack, Roberts, & Rimland, 2007). Students testify to the steady growth of social networking in their academic progress from 2007 to 2010.

Many students at higher learning organizations wish to improve their traditional means within their institutions. Unifying social networks to improve classroom learning, and this is where they spend most of their time. Using social media improves education access and engagement, and informally fills the learning distance between students and teachers (Bull et al., 2008). The use of social media is mutual to both entertaining and knowledge amongst students of higher education. Students at the university use numerous social media stages to the point that this is now an integral aspect of their everyday lives for personal and learning purposes. Smart phones and mobile devices weave social media together.

Many scholars argue that time consumed on social media is elsewhere the essential time, which can lead to piracy and privacy distresses and contribute slightly to real learning conclusions for students in most cases. Often, the use of social media is seen as superfluous or actually not conducive to improved learning outcomes (Moran, Seaman, & Tinti-Kane, 2012).

Studies have shown that most social networking students spend time and effort establishing relationships together on the same grounds and with shared interests. Some educational experts were persuaded that incorporating social media into the traditional contact and interaction between students and teachers simplifies many of the problems that had arisen in education. According to

others, social media networks have welcomed the opportunity to provide teachers with a platform for quick learner networking and constructive networking.

Social networking is a primary determinant of user happiness. Satisfied students also improve results for the class. In this study student satisfaction used as a mediating factor social media and student performance. This study aims to bring more clarity to this field of research by exploring the relationship between media usage and academic success among students. This is why our study's main objective is to analyses whether using the platform of the social network has a positive effect on the academic outcomes of the students (Moran et al., 2012).

2. Literature development

The educational performance of students in higher education is partial by various socioeconomic, psychosomatic, and conservational influences (Hijazi & Naqvi, 2006). The students' academic success is always in the educators' best interest. This agrees them to assess not only students' information stages but also the effectiveness of their own coaching methods, and undoubtedly offer a scale of student satisfaction. A quantity of educations has strenuous on issues that influence the academic performance of higher education students (Graunke & Woosley, 2005). There are several factors that influence student success, some of which are addressed in depth in this study (social media, and student satisfaction) are as follows.

2.1 Student performance

Social networking has a larger influence on the academic success of its users across fields of study. This is also seen in diverse races and genders. Indeed, the creation of Facebook social network has been found to promote student growth (Junco, 2012). There are also rare cases where the findings indicate positive Facebook-Twitter ties (Wirthman, 2013). Integration to enhance students' learning spends more time using social media for non-educational reasons, impacting their academic performance (Englander, Terregrossa, & Wang, 2010).

Students prefer to use the Internet for their own purposes and their academic results are influenced by this. This research was further developed by Kirschner and Karpinski (2010), who found that

social media users had lower grade rankings than students who never participate in social interactions. There are also general advantages linked to social media use. Roblyer, McDaniel, Webb, Herman, and Witty (2010) clarified that within their respective faculties, social media is the medium of contact between students and lecturers. In addition, Kolek and Saunders (2008) concluded that student social media users have in no way influenced their academic performance. Social media connotation to academic achievement. Findings suggest social media use, and there is a clear negative connotation of academic achievement. Respondents indicated having spent less hours on average during a week studying compared to non-users. The majority of respondents reported using social media sites at least once a day (Kirschner & Karpinski, 2010).

Social networking has erupted as a grouping of online homily that allows people to generate, post, bookmark, and web content at an unusual pace (Jha & Bhardwaj, 2012). This infringed the conversation that happened in communicate, in which people had to rely completely on conservative approaches like letters and telephone calls as a way to get in contact with associates and family. Communication currently is as unassuming as going to a neighbor's abode to deliver a piece of information, or vice versa, using social media. Social media are rapidly transforming society's public discourse and setting trends and agenda in matters ranging from climate and policy to knowledge and entertaining (Asur & Huberman, 2017). The driving force behind social media adoption is increasingly broad access, comfort, flexibility and accessibility to social networking (S. Brown, 2010).

These factors have made social media adoption very simple by opening it up to new ways of producing and sharing knowledge, and have significantly enhanced human life. Another benefit of digital media outlets is that they are whichever free or want zero speculation, thus eradicating a potential complication to adoption. Unknown motivating, as we know, is ever entirely one-sided, so it is with social media as it arises with both constructive and deleterious effects. There's a link between university use of social media and academic success of students. Higher education has had different views and opinions which acknowledge four main advantages of using social media. These include: strengthening partnerships, the motivation for learning, offering customized course content and developing collaboration skills (Wheeler, YEOMAN, & WHEELER, 2008).

Students are socially connected and therefore share their day-to-day learning experiences and conduct social media conversations on various subjects, thus social network websites attract

students' attention and thus divert them to non-educational and inappropriate activities such as meaningless chats. Research has shown the prevalence of students who use high social media.

2.2 Social Media and student performance

The use of SM by college students is certainly a fascinating area of study for educators and social scientists alike (Rifkin, Longnecker, Leach, Davis, & Orthia, 2012). Social media use it for messaging, talking and socializing. The use of social media in higher education for many key reasons tends to be clarified. Its use has been checked by keeping acquainted with improving student experience by offering e-support services on their behalf (Dabner, 2011). Students familiar with promoting the interaction with and between students in virtual cities. Facebook seems to be most likely the proposed option for meeting students as a means of contact, among others (Mack et al., 2007). Web pages' focus heavily on the online growth of certain metropolitan areas alongside common interests or events. Therefore, offer them tools to help make this possible. In the recent time, the websites addressed the major issue teachers have raised inside the collective learning segment. For example, there is a lack of spirit in the humanitarian sense and an ignorance of teaching it. However, websites have helped solve a few individuals' issues by adding something useful to a person's learning process with the aid of an engaging partner, facilitating interaction within the human being. This caused an increase in people's attraction to collective learning and a lot of researchers to look at this phenomenon from the aspects of conducting social science studies and consider the real reason behind the informed website appeal (Ractham & Firpo, 2011). Teachers indicated that the use of new technology would encourage online communication between students outside the classroom, outside the school. Students may provide specific information about themselves (e.g. full title, date of birth etc.) by updating their user profiles and configuring their personal pages in the sense of internet forums or blogs.

This lets instructors change this programmer material using profiles of the students. About social media, such as Wikipedia plus some blogs, are endorsing research-based and collaborative activities amongst students. This open entrance for constructive involvement and can also provide occasions for good knowledge. Linked to this concept of collaborative learner expansion, social networking enables learners and instructors to share and publish learning-related material (e.g.

course ingredients such as curriculum, progression notes, projects, test circumstances, etc.) and enables peer input. By publishing and sharing their work through blogs, wikis, or podcasts to a wide audience, learners take advantage of the ability to adapt new concepts and transform their own understanding through reflection (Griffith & Liyanage, 2008). Students may work collaboratively by exploring opportunities provided by the online social environment to solve some academic or peer-related problems, particularly at higher learning levels. This means students can build positive conation through collaborative or team-based learning by integrating social media, with the aim of working towards particulate matter. Establishing a network of social media for college students with the aim of improving both collective research and social interaction.

Students participated in collaborative projects and facilitated content creation, editing, and discussion. The study ensures that learning through social networking is effective provided that it promotes the development of mutual understanding and encourages active user engagement. However, the use of social networking to improve methods of learning remains in the earlier process, and should really be further explored. Social networking to assistance collective learning can be the pc network used in the learning community to facilitate student learning processes and participate in group system classes, including teachers, experts and workplace entrepreneurs. Since construction understanding methods are given that are special and suit the basic meaning of solid life (Yampinij, Sangsuwan, & Chuathong, 2012) understanding and experience.

Social networking affects students, and as experienced entrepreneurs must be remembered. The Internet channel is positive with an increase in its programmers. Online words have broadened their collective character through social networking. Hooking up with social networking started out as a niche trend but it's a phenomenon at the moment. The websites are used in many ways including growth of the metropolitan area, chatting, blogging, etc. Even today, on many websites, numerous organizations are creating groups (Mehmood & Taswir, 2013). Furthermore, increased usage of blogs has become a worldwide phenomenon. What started out as a hobby has transformed from all over the globe into a social standard and a style of human life for a few computer literate people (Ellison, Steinfield, & Lampe, 2007). These websites have been particularly standard by adolescents and teens in order to connect with their friends, exchange knowledge, reinvent their persons and showcase their social life. While it is beneficial to use technology-enhancing to get

together with others with internet knowledge, websites are now predominantly a website-driven activity.

Like W. Additionally, Facebook users Al-Rahmi and Othman (2013) report low academic performance over time. Social media has a detrimental correlation with academic achievement among students, which is substantially greater than their benefits. Accordingly, web addiction has given rise to the use of the Internet in recent decades. Nalwa and Anand (2003) said addicted users continue to use the Internet to recover their personal and professional obligations, leading to little change in academia. Media users dedicated less time than non-users to their tests, and thus had lower GPAs. Facebook remains a big diversion of the current generation between the various specific distractions of each generation, it also said. According to Kubey, Lavin, and Barrows (2001) through the use of synchronous networking facilities such as internet pages and forums, the educational performance deficiency was associated with Internet dependence. It has benefits and drawbacks of using any social network. Comments were made on its impact on the academic performance of the students.

Some researchers were investigating social networking usability among college students with their academic performance and the end results. When the media is overused in such a way that learning or its advancement does not improve academically they have a negative effect and power. Other researchers explored the same problem but either found no substantial correlation between the use of social interacting and student academic performance (Ahmed & Qazi, 2011), or even an influence in student academic performance (Hargittai & Hsieh, 2010). Students' academic life has progressed to a new level with the advent of these social media networks and many studies have shown that SM plays a major role for students. Higher education students identified four (4) major benefits in their study which included the use of social media; improving relationships, enhancing learning motivation, providing customized course material, and developing teamwork skills. In reality, social media has made a tremendous contribution to promoting 21st century learning. There is evidence that more students, including doctoral students, usually use social media to enhance their studies (Khan, 2012).

The answers to the causes of today's globally distributed studies might not be far-fetched from the positive impact generated by social media networks when properly used. And there was another school of thought arguing that social media is a challenge to the students' academic life. Social networks distract the students' attention and emphasis on learning, converting it into non-

educational activities such as unnecessary and repetitive talking, following which several studies were performed, the findings of which refute this claim. Students learned more vocabulary, developed writing skills and minimized the frequency of their meaning mistakes on SM. Social networking as an educational tool literally enriches knowledge by providing both scholars and instructors with the ability to participate in new and very exciting ways, thus facilitating interactive learning modes. Flexible learning is said to be increasing the flexibility of what, where, and how people learn. It supports numerous worldwide learning modes including heavily patronized e-learning. Identify the impact of social media this study has on student success.

2.3 Students satisfaction and students' performance

Satisfaction is the customer's view that the intake yields outcomes to an Opposite Unhappiness satisfaction criterion. And the concept of pleasure has recently spread to the phenomenon of higher education. A complex, multidimensional concept of student satisfaction reflects the still minimal amount of study (Navarro, Iglesias, & Torres, 2005). Furthermore, student satisfaction is the benefit of a student's subjective assessment of the various educational outcomes and experiences. Repeated campus-life experiences continually shape satisfaction among students. Satisfaction is a well-investigated topic in both academic besides non-academic sets, with data about student satisfaction in academic settings enabling universities and campuses to make their program more responsive to changing customer needs (Wheeler et al., 2008). It is necessary to evaluate efficiency measures specific to each college, department and programmer curriculum in order to make the curriculum more effective and responsive (Oja, 2011). A programmer 's effectiveness can be assessed by direct performance.

Continuous monitoring and improving the teaching unit 's productivity is a significant 'close-loop' process for university educators. In this study student satisfaction was evaluated from an educational perspective. Furthermore, scholar satisfaction as a 'short-term insolence subsequent from an assessment of a student's instructive experience' and demanded that student satisfaction was achieved when their actual experiences or outcomes met or surpassed their initial expectations. (Hill & Epps, 2010). In addition, student satisfaction evaluations are made in two classes, with the first in the classroom focused on teaching and learning measurement, and the second focusing on the comprehensive student experience. The student satisfaction with their overall college

experience has been defined as student happiness or contentment for the purposes of this study (Hill & Epps, 2010).

Student retention is vitally essential for higher education institutions. Navarro and others. (2005) recorded student satisfaction was an essential indicator of performance for higher education institutions, with many universities taking rigorous quality assurance procedures. Many universities have been involved in many studies on the relations between student satisfaction and quality of higher education services to increase transparency by "streamlining processes and improving student, faculty, and staff services" (Brown, 2010). However, some reports have argued that customer meaning has still not been clearly defined in higher education. On the other hand, the success of student assessment is a direct indicator of their accomplishments by rigorous evaluation practices. In contemporary higher education, the relationship between student satisfaction and academic success is critical, generating significant attention by teaching practitioners and academics because it can reinforce important synergies in the students' educational experience at work. Higher levels of relative success (tele course achievement vs. prior academic performance) were related to student satisfaction with the technical aspects of the course, student satisfaction with the timeliness of material exchange with the teacher, and overall student satisfaction (Hill & Epps, 2010). In any perspective, satisfaction between students increases their efficiency. In this study student satisfaction was obtained from Koera universities and analyses the effect of satisfaction on academic achievement of students.

2.4 Two factor Theory

This theory was penned by Frederick Herzberg, also named Motivation-Hygiene Theory, (Herzberg, 1959). An American psychologist, who stayed actual attentive in people's assurance and job satisfaction, developed the theory. He performed his research by interviewing a group of people about their good and negative work experience. He was staggered that the assembly responded to inquiries about their good practices so contrarily from those about their negative experiences (Herzberg, 1959); Grounded on this, he established the hypothesis that there are two types of factors which rely on people's work satisfaction. Factors of happiness (motivators / satisfiers) and of happiness (factors of hygiene / satisfiers). This theory was used to assess individuals' contentment actions (Herzberg, 1959). Performance, acknowledgement, job status, assurances and prospects for development all fall under satisfiers. This analysis consists of two factors that form the principal part of the theory of two factors. Motivational factors or happiness

improve people's success according to this theory (Herzberg, 1959). There are several possibilities to assess degree of satisfaction. If satisfaction level is poor, student performance will be low and high satisfaction level will eventually lead the high performance (Herzberg, 1959).

Hypothesis development

H1; SM has positive effect on SP

H2; SS mediates between social media and SP

H3; SS has positive effect on SP

3. Methodology

3.1 Scale Measurement

The study scale was arranged by inclusive review of literature. Besides demographics variables, questionnaire was consisted social media, student's satisfaction, and student's performance. The survey, respondents were requested to ratio their level of arrangement with specific items using Five-Point-Likert scale, fastened with strong disagree to strong agree. All the items were adapted from literature.

Table 1

Adopted scale for constructs

Sr.no	Variables	Items	Source of items
1	Social media	7	Mills, Knezek, and Wakefield (2013)
2	Student satisfaction	3	Zhu (2012)
3	Student performance	5	Banks (2006)

3.2 Sampling and data collection

Primary data were collected from students at different universities from Pakistan A non-probability convenience sampling technique was followed to administer student's performance. Only those student's who were users of social media were deliberated as the sample for current research. After initial screening 299 valid questionnaire were used finally for data analysis.

3.3 Data analysis for demographic variables

In present study, cross- sectional survey was administered and the demographics analysis retrieved by SPSS software. The findings shown in following tables.

In this study, 299 respondents were selected through survey, in which 145 (48.5%) were male, and 154 (51.5%) were female as shown in table2.

Table 2

Gender of Respondents

	Gender		
	Num	%	Valid Percent
Men	145.0	48.50	48.5
Women	154.0	51.50	51.5
Total	299.0	100.00	100.0

In the study, data was collected from students, hence, respondents were youngster. In respect of age 62 (20.7%) were below 20 years, 174 (58.2%) were 20-25 years, 20 (6.7%) were 26-30 years, 24 (8.0%) were 31-35 years, and 19 (6.4%) were elder than 36 years. In respect of educational level, there were 124(41.5%) from bachelors, 98(32.8%) from Masters, 36 (12.0%) from MS, 28 (9.4%) from Ph.D. and 13 (4.3%) were other than these level. Majority of were young as from bachelors. They are mostly active on social media. As this study focuses on university students and the departments of universities for respondent categories. 87(29.1%) respondents were from commerce specialization, 56(18.7%) were business administration, 56 (18.7%) from social sciences, 40(13.4%) from engineering, and 60(20.1%) from law department. Mostly students were commerce department that were active on social media.

Table 3

Age of Respondents

Age

	Frequency	Percent	Valid Percent
Below 20	62	20.7	20.7
20-25	174	58.2	58.2
26-30	20	6.7	6.7
31-35	24	8.0	8.0
More than 36	19	6.4	6.4
Total	299	100.0	100.0

Table 4

Educational level of respondents

Level of Education			
	Frequency	Percent	Valid Percent
Bachelors	124	41.5	41.5
Masters	98	32.8	32.8
MS	36	12.0	12.0
Ph.D.	28	9.4	9.4
Others	13	4.3	4.3
Total	299	100.0	100.0

Table 5

Faculty distribution of respondents

Faculty distribution			
	Frequency	Percent	Valid Percent
Commerce	87	29.1	29.1
Business Department	56	18.7	18.7
Social sciences	56	18.7	18.7
Engineering	40	13.4	13.4
Law	60	20.1	20.1

Total	299	100.0	100.0
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There are several means to access the social media in which respondents were using 42 or (14.0%) laptops, 168 (56.2%) were using smart phone, and 89 (29.8%) were iPad users that were using social media. There was diverse frequency of usage social media by individuals such as 38 (12.7%) were used social media once in a day, 69 (23.1%) used 2-3 times in a day, 125 (41.8%) were using 5 times in a day, and 67(22.4%) were using more than 10time social media in a single day. The research shows that mostly people using social media 5 times in a day regular basis. In this research, student's views were it is a source to getting information and way of good communication. Furthermore, can interact with friends, family, and even people. It can enhance the leaning, awareness and socialization such as 13(4.3%) student's views that it is source of getting information, 89(29.8%) students views that it is good way of communication, 71(23.7%) views that it gives awareness, 76 (25.4%) views it enhance learning of students and 50 (16.7%) views that it is socialization enhances.

Table 6

Accessing means of social media

Means of media			
	Frequency	Percent	Valid Percent
Laptop	42	14.0	14.0
Smart Phone	168	56.2	56.2
iPad	89	29.8	29.8
Total	299	100.0	100.0

Table 7

Frequency of usage social media

How many times check in a day

	Frequency	Percent	Valid Percent
Once in a day	38	12.7	12.7
2-3 times in a day	69	23.1	23.1
5 times in a day	125	41.8	41.8
Above 10 times in a day	67	22.4	22.4
Total	299	100.0	100.0

Table 8

Views of Students about social media

Views of Students about social media			
	Frequency	Percent	Valid Percent
It is provides information and communication	13	4.3	4.3
Source of contact between friends and family	89	29.8	29.8
Means of awareness and advertisement.	71	23.7	23.7
It improves learning and education.	76	25.4	25.4
It reassures socialization.	50	16.7	16.7
Total	299	100.0	100.0

Table 9

Reason of connecting with social media

Reason of connecting

	Frequency	Percent	Valid Percent
Entertainment	31	10.4	10.4
Chatting	32	10.7	10.7
Learning	70	23.4	23.4
News	49	16.4	16.4
Searching	40	13.4	13.4
Sports	77	25.8	25.8
Total	299	100.0	100.0

There are several reasons of connecting students with social apps such as 31(10.4%) students connecting for entertainment, 32(10.7%) for chatting, 70(23.4%) used for learning, 49(16.4%) connecting for news updates, 40(13.4%) for searching something required, and 77(25.8%) for sports connecting with social media. According to survey, 261 (87.3%) students have positive effected by social media and 38(12.7%) negatively affected. There are number of apps that are using for social connection such as WhatsApp 89(29.8%) students are using, 11(3.7%) Facebook users, 25(8.4%) twitter, 19(6.4%) YouTube users, 25(8.4%) Viber users, 21(7.9%) IMO users, 18(6.0%) We Chat users, 21(7.0%) LinkedIn, 36(12.0%) Instagram, 34(11.4%) TikTok users.

Table 10

Effects of social media

Positive or Negative effect			
	Frequency	Percent	Valid Percent
Positive Effect	261	87.3	87.3
Negative Effect	38	12.7	12.7
Total	299	100.0	100.0

Table 11

Apps using for connecting social media

Apps using on social media			
	Frequency	Percent	Valid Percent
WhatsApp	89	29.8	29.8
Facebook	11	3.7	3.7
Twitter	25	8.4	8.4
YouTube	19	6.4	6.4
Viber	25	8.4	8.4
IMO	21	7.0	7.0
We Chat	18	6.0	6.0
LinkedIn	21	7.0	7.0
Instagram	36	12.0	12.0
TikTok	34	11.4	11.4
Total	299	100.0	100.0

3.4 Data Analysis

To assess data of current study used Smart PLS-SEM approach because of its several benefits and considered best than other approaches. It is used not because of its popularity in research even it is best for analysis to exhibit the association between latent constructs in marketing, business research (Hair, Ringle, & Sarstedt, 2013). PLS measured best when the examination is apprehensive to analysis theoretical framework from an estimate viewpoint. When structural model is multifaceted and involves several constructs, indicators and relationships. When need to obtain data from small population and restricted sample size, this technique useable small sample size. Furthermore, when research necessitates latent constructs scores for follow-up investigation and face about issues are concern such as data normality absence (Hair, Risher, Sarstedt, & Ringle, 2019). In Smart PLS we use two types of model's measurement model and structural model.

3.5 Measurement Model

This model is used to know how well all items of constructs of theoretical framework connected with constructs in respective manners. This model used in two types of models such as reflective and formative models but research need to identify which type of model, because for both models utilization is different. In this study, we used reflective motel are as follow. In this model we measure three type of validity and reliability such as content validity, convergent validity, and discriminant validity (Hair et al., 2019).

3.5.1 Content validity

Content validity states to a situation when all indicators of construct that measure the specific construct reveals greater loading than other constructs of the framework (Rehman, Bano, & Bhatti, 2019). In other words, a condition when all items express the same meaning in particular construct (Babac, 2011). Table 12 reveals content validity.

Table 12

Cross loading

	Social Media	Student Performance	Student satisfaction
SM1	0.769	0.564	-0.193
SM2	0.536	0.437	0.003
SM3	0.8	0.67	-0.222
SM4	0.748	0.797	-0.213
SP1	0.748	0.797	-0.213
SP2	0.626	0.775	-0.253
SP3	0.66	0.85	-0.345
SP4	0.823	0.833	-0.306
SP5	0.743	0.843	-0.282
SS1	-0.167	-0.233	0.762
SS2	-0.177	-0.267	0.902
SS3	-0.253	-0.354	0.898

Convergent validity refers to measure when they are associated with construct theoretically. It is sub category of construct validity. It is considered the degree of correlation between constructs and literature shows that it can be measured by AVE and AVE values should be greater than 0.50 as shown in table.

Table 13

Convergent validity

Constructs	Items	Loadings	CR	AVE	
Social Media	SM1	0.769	0.809	0.520	0.801
	SM2	0.536			
	SM3	0.8			
	SM4	0.748			
Students Performance	SP1	0.797	0.911	0.672	0.801
	SP2	0.775			
	SP3	0.85			
	SP4	0.833			
	SP5	0.843			
Students satisfaction	SS1	0.762	0.892	0.734	0.057
	SS2	0.902			
	SS3	0.898			

3.5.2 Discriminant validity

Discriminant validity means a state where every single construct of framework diverges from other constructs (Rehman, Bhatti, & Chaudhry, 2019). It ensures that measures of definite construct not related with other constructs measures in respective manners just relate with their own perspective (Hair, Hult, Ringle, & Sarstedt, 2014). Two way to measure the discriminant validity in which first, compare the AVE² with its correlation values and second method is to compare the AVE with squared correlation values. The upper value diagonally should be greater than other constructs in that rows and columns (Fornell & Larcker, 1981).

Table 14

Discriminant validity

Variables	SM	SP	SS
SM	0.721		
SP	0.885	0.820	

SS	-0.239	-0.341	0.857
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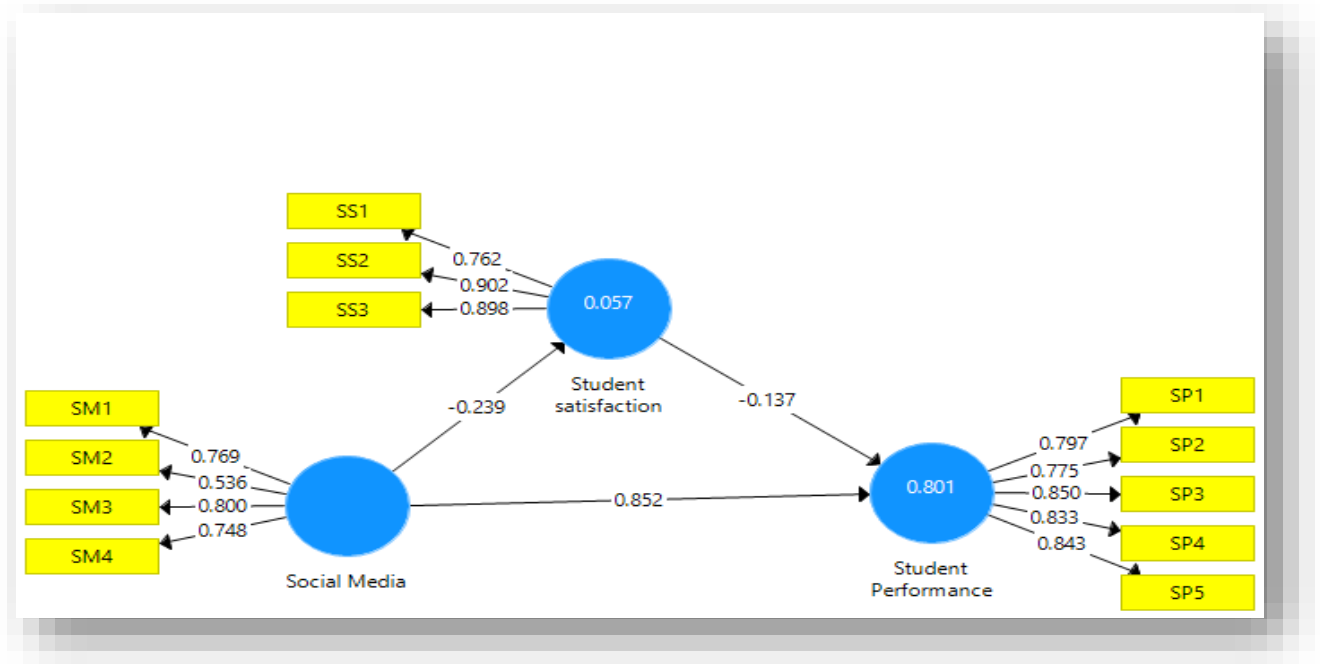


Fig.1. Measurement Model

3.6 Structural model

the structural model that signifies the underlying theory of the co-efficient path model is discussed. Several things are covered in the structural model such as significance of the path coefficients as recommended by Hair et al. (2014). The researcher used SmartPLS 3.2.8 to compute all the tests of the structural model. In this study used a bootstrapping technique with 5,000 subsamples and 550 cases were run to obtain significant factor loadings and path coefficients.

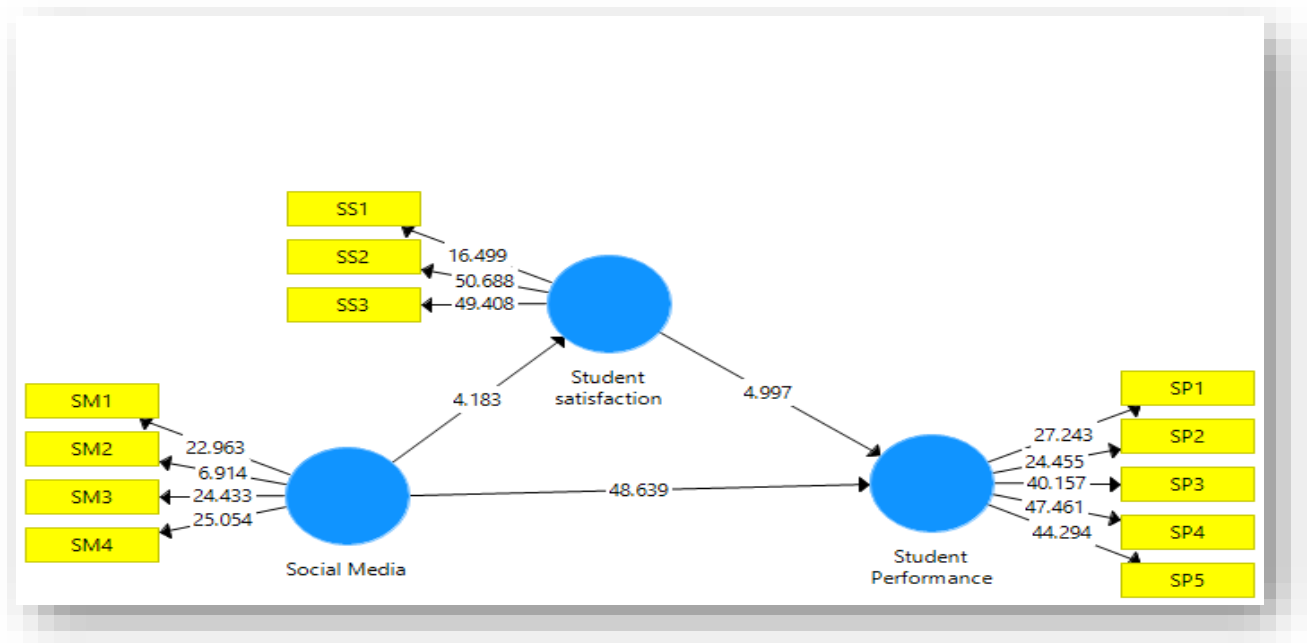
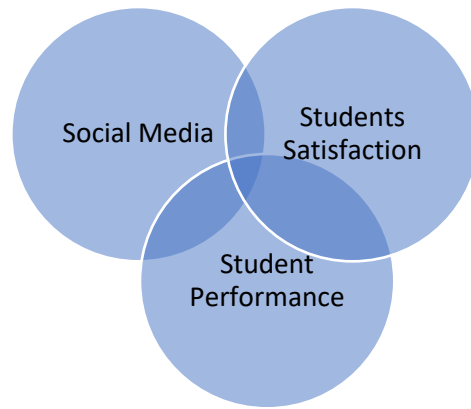


Fig.1. Structure Model

4. Results

This study has total three hypothesis to test the relationship among factors in which two direct and one indirect relationship. Such social media has constructive effect on student's performance. They can share knowledge with others and can communicate with their social circle anytime. SM has positive effect on SP (beta value=0.852, $t=4.639$, and $p=0.000$) and H1 is supported. Students satisfaction effects their performances that also affected by media. If students satisfy their performance will be good and if they will not satisfy they ultimately perform poor. Hence, satisfaction of students mediates the relationship between social media and performance of students and (beta value=-0.239, $t=4.183$, and $p=0.000$) H2 supported. Students' performance influenced by their satisfaction (beta value=-0.137, $t=4.997$, and $p=0.000$) H2 supported.



In this study three hypothesis were proposed that supported and accepted. The outcomes of this study align with two factor theory that motivation, satisfaction enhance the performance of students. High level of satisfaction leads high performance and in contrast, Poor satisfaction leads poor performance (DeShields, Kara, & Kaynak, 2005).

Sr.No	Hypotheses	Sample	Std. Dev.	T	P	Outcomes
	Paths					
H ₁	SM--> SP	0.852	0.018	4.639	0.000	Accepted
H ₂	SM --> SS-- >SP	-0.239	0.057	4.183	0.000	Accepted
H ₃	SS-- >SP	-0.137	0.027	4.997	0.000	Accepted

4.1 Discussion and conclusion

The main aim of this study is to determine the impact of social media on student success, with student satisfaction's mediating function. This analysis was quantitative in nature and descriptive, discussing current research population. This research was deductive in nature in developing hypothesis based on established theory and testing the theory proposed with hypothesis. In our daily lives the social media is really growing. It makes us closer to the universe, and more social. It offers a forum where the world's population can communicate freely and at any time with others.

These implications illustrate that the success of the students with interrelated peers, teachers and the assignment is causative to the theoretical output of the students progressing. These findings underline that the output is affected by social media and its incorporation, interaction with others. In addition, it has a positive impact on student success and acknowledged H1 hypothesis and related results with this research (W. Al-Rahmi & Othman, 2013; W. M. Al-rahmi, Othman, & Musa, 2014; Maqableh et al., 2015). In humans, happiness contributes to the good goal. If people are pleased with any activity, they continue to do that and they would stop doing it again if they feel disappointed with spection activity. Similarly, student satisfaction often contributes to their success, and higher performance attracts more satisfaction. This study's H2 and H3 assisted and alineated with other trials (W. M. Al-rahmi et al., 2014). This study's results demonstrate that both social media and happiness have a positive impact on student success in learning, academics, and productivity. The result close to the applicable theory, too.

5. Theoretical implication

This study potentially contributes to examining the influnce of social media and student satisfaction on success of students with meditation participation that was overlooked in earlier resersh. This research mediation between SM and SP as SS. This study established theoretical framework based on litrature and with two factor theory. This study allows the upcoming researcher to analyse this research ear and contribute further to reviving success litrature. This study improves student success understanding as well as the role of media and contentment.

6. Practical Implication

This study explore the relationship between SM and SP with the mediation of SS. Furthermore, this study practically contribute in various aspects such as students learning, awaerness, knowledge, and interation with other through social media. This study can help to students, teachers as well, that how they can get benefits and make more usefull social media in their daily life. To enhance the performance of students universities, colleges, and teachers should aware students to make social media more usefull tool for learning and integration. This study also helps to teachers that how they can design their assignment so that students do them with media interaction and friends, peer's collaboration.

7. Limitations and future suggestions

Like previous studies, this research also has some limitations such as, this study is conducted geographically in Pakistan as it is developing country. This study indicates that in future, the results should be applied geographically in other developing and industrialized countries. In addition, this research focuses on the impact of social media on the success of students but should also concentrate on the effect of employee success on social media in the future. Due to limited funding, this research was cross-sectional but in the future it is proposed that longitudinal study should be undertaken to compare social media results and post and pre-effects on students. In addition, this study used only one independent variable but suggested in future studies to concentrate on other variables that influence student success such as television, web, technology, motivation and attitude. This research utilized mediation but proposed utilizing mediation and moderation in future studies to examine success such as confidence, incentives, motivation, technology, learning, and culture.

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Impact of Online Education System on Students Satisfaction at Pakistan Higher Education Institutions during COVID-19

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Abstract

In Pakistan, the situation of the education system has changed during the month of March, when govt. of Pakistan has closed the education institution throughout the country due to increased cases of COVID-19. This situation has forced the universities to change the traditional learning system and implement an online learning education system to complete the on-going spring-20 semester. The aim of this research is to discuss the impact of the online learning education system on students' satisfaction in the higher education institutions of Pakistan during the pandemic. To achieve the objective of the study the data is collected from 391 participants attending online classes through questionnaires from the higher education institutions of Pakistan. The result of this study shows that students satisfied with the online education system and also highlighted some issues such as availability of internet access, and many others. The findings of this research help educationists, practitioners, professionals, and policymakers formulate the policies on the online learning system in higher education institutions during the pandemic situation.

Keywords: COVID-19; students' satisfaction; higher education institutions; Online Learning System; Lockdown.

1. Introduction

A novel Coronavirus is an outbreak from Wuhan city of china in late December 2019, which spread worldwide including Pakistan in February 2020. When the number of cases is increasing the country has faced lockdown after a three-week since its first case reported on taftan border with Iran. To protect the students from the pandemic, the Government of Pakistan has closed all the educational institutions across the country on 13th March 2020 (Ali, 2020). The government of Pakistan has issued orders to the Higher Education Commission to direct higher education institutions to start their online/distance learning modes, reschedule the on-going exams and assistance to their student's regularly in online classes till pandemic condition (Ali, 2020). The closure of educational institutions affect the educational activities, students have faced many issues such as cancellation of classes and delay in the schedule of the examination which make theme disappointed in these circumstances (Almanthari, Maulina, & Bruce, 2020).

Many schools, colleges and universities have shifted temporarily laid off in their educational activities. In private sector educational institutions, teachers face a lot of problems like job loss, salary cuts, internet connectivity issues for online classes, less technical logical equipped, postponed or reduced employee bonuses and increments. The main root causes of this problem, low fee collection which may create problems to run and manage the institutions. In this situation, many institutions downsize their workforce to manage their budgets. This pandemic has effects on schools, colleges, and universities at the global level to shut down their campuses for face to face classes, so students should follow social distance measures to control over Covid-19 (Toquero, 2020). However, the virtual learning system may run smoothly needs proper training because it is not possible overnight.

An educational institution across the global is used available technical resources to transform the best online learning material handed over to students in all fields (KAUR, 2020). In this current situation, the impact of coronavirus on the education sector will increase, may face delay in the education process lead to slow growth to their maturity in the future especially if need to understand the policy of education. In this study, we discuss the impact of online education system on student satisfaction during this pandemic on the education sector of Pakistan and also highlight the problems faced by students during online learning systems related to the internet such as access to the internet at costly rates, effective use of the internet, and many other problems.

A very little recent literature has explored the challenges and opportunities linked with e-learning under this pandemic COVID-19. Researchers are trying to explore the recent online learning course/studies benefits & challenges and its impact on student satisfaction. This research is revolving around examining the impact of online education policy, challenges, associated with higher education institutions that need to be investigating on student's satisfaction (Almanthari et al., 2020). Therefore, this study highlights the impact of the online learning system to know the challenges and hurdles faced by the students under this pandemic COVID-19.

This research study is a frontline role towards depth exploration of the COVID-19 disaster, which is an unpredictable impact on people across the country. It is a serious need to know the cause in economics, governance model, human interaction, and education sector, and design framework on how to successfully deal with this disaster situation. This study can be helpful for policymakers and education researchers in devising prompt strategies for the multidimensional impacts of COVID-19 on Pakistan education institutions. The objective of this research is a deeper insight analysis during the COVID-19 phase to know the impact of the online learning system at higher education institutions on student satisfaction.

2. Literature Review

Coronaviruses are a group of related viruses that cause diseases in mammals and birds. Coronaviruses cause respiratory tract infections that can be mild, such as some cases of the common cold, and others that can be

lethal, such as SARS, MERS, and COVID-19 in humans (Hageman, 2020; Li et al., 2020; Velavan & Meyer, 2020). The government of Pakistan has closed the educational institutions to protect the students from this COVID-19. Currently, very limited literature is available on the impact of the Covid-19 situation on the education sector (Chinazzi et al., 2020). COVID-19 is not only impacted the education sector, also the rate of its impact rapidly spreading every sector of human life. Scientists are trying to find out a medical solution to control this panic situation with vaccines. This epidemic has shut down every sector of society including the education sector and other sector face a lot of restriction and following measures across the border (Kraemer et al., 2020).

The education sector is a key point of social interactions and activities, if university personnel working is suspended, many students miss the on campus activities that are necessary for them. This kind of academic institution suspension leads to instability may inflict psychological distress and depression among students (McCarthy, 2020). Information and communication technology is important for higher education, but a limited budget for education in Pakistan. There are no special funds are allocated for the latest technology initiatives in the institutions. This pandemic has pushed educational institutes towards an online learning system when no one was ready for this transition.

In this pandemic situation closure of educational institutions in Pakistan has to use e-learning and management systems to conduct online classes. Online education courses have provided by hundreds of institutions at the national or international level, but there are two kinds of issues are attached, first very little established setup regarding the effects and effectiveness of online education (McPherson & Bacow, 2015), second is the digital system varies on a worldwide range that every institution has a set of priorities (Liguori & Winkler, 2020). A digital learning world is partially missing real sharing ideas, information, and knowledge (Britt, 2006). Most of the educational institutions in Pakistan, follow the teaching methodology as well as administrative activities at a manual level (Salam, Jianqiu, Pathan, & Lei, 2017).

An online learning system is an environment there is the liberty of time and space, unlike a traditional learning system. Online learning system provides flexible and substitutes systems to those who are unable to attend the traditional classes. Online learning system with the advancement of technology has secured a better place in the academic institutions (Baber, 2020). Researchers and many others are very keen to know which learning system is better than others. To know the answer to this question it is important to measure the students' satisfaction. In the literature, many studies have been conducted to know the relation which one is better online learning or traditional learning system. In an online learning system, students perform very well to acquire more knowledge online and their course completion rate, level of motivation, and satisfaction is increasing (Bernard, Borokhovski, Schmid, Tamim, & Abrami, 2014). Many others have also concluded that online learning provides a better result than traditional learning system (Lockman & Schirmer, 2020; Ryan, Kaufman, Greenhouse, She, & Shi, 2016). On the other hand, traditional learning is

more successful such as face to face interaction with the tutor, student attendance, satisfaction and motivation than online learning system(Adams, Randall, & Traustadóttir, 2015).

This current pandemic situation has raised many questions, such as education institutions have enough resources available to shift on campus classes to online classes is any plan available to address difficulties and challenges faced by students as well as instructors, and most important is education institutions provide internet at low cost to students and instructors in both rural and urban areas. The lack of access to fast speed and costly internet connection barriers for students, especially living in rural areas (Wains & Mahmood, 2008). To address these issues, the aim of this study to examine the impact of online learning system on student satisfaction. in this study we highlight these problems faced by students during online learning system such as access to the internet at costly rates, effectively use of the internet, online interactions with instructors, challenges, and many other problems.

3. Research Methodology

The quest to achieve the purpose of this research data is collected through an online questionnaire technique from students currently attending online classes during pandemic at universities of Pakistan. The detail of universities is provided in Table 1. In this study, the questionnaire is adopted by (Bernard*, Brauer, Abrami, & Surkes, 2004) to assess the effectiveness of the online learning system. The sample included 391 education students: such as 166 male students and 225 female students. The participants included Intermediate (N=32, 8.2%), Bachelor (N=321, 82.1%), MPhil/MS (N=32, 8.2%) and PhD (N=6, 1.5%) students respectively. The detail of the results is shown in table 2, that shows that students (N=203, 51.9%) belong to rural areas and (N=188, 48.1%) belong to an urban area. Internet connection are used by participants to attend online classes such as (N=184, 47.1%) Mobile data, (N=206, 52.6%) Wifi/DSL and (N=1, 0.3%) used both. Software applications are used by participants to attend online classes such as Google Meet (N=31, 7.9%), Microsoft Team (N=43, 11%), Zoom Application (N=267, 67%), Whatsapp (N=7, 1.8%), and other applications (N=48, 12.3%).

Table 1

Institutes of Respondents

Name of Institute	No. of Respondent
Allama Iqbal Open University	6
Alnoor International Institute of Islamic Education and Research	3
Army public School & College	1
Comsats University Islamabad	1
Government College University Faisalabad	31
Islam Medical College Sialkot	16
Kaharian Girls Cadet College kallar kahar	1

Murray College Sialkot	1
Punjab Group of Colleges	42
Qaud e Azam University Islamabad	7
Superior College	4
University of Central Punjab	3
University of the Punjab	3
University of Gujrat	74
University of Sialkot	195
The University of Lahore	3

Table 2

Frequency distribution

Attributes	Categories	Frequency	Percentage
Gender	Male	166	42.5
	Female	225	57.5
Education level	Intermediate	32	8.2
	Bachelors	321	82.1
	Mphil/MS	32	8.2
	Phd	6	1.5
Internet Connection	Mobile Data Co	184	47.1
	Wifi/Dsl	206	52.6
	Both	1	0.3
Residence	Rural	203	51.9
	Urban	188	48.1
Software Application	Google Meet	31	7.9
	Microsoft team app	43	11
	Zoom	262	67
	whatsapp	7	1.8
	Others	48	12.3

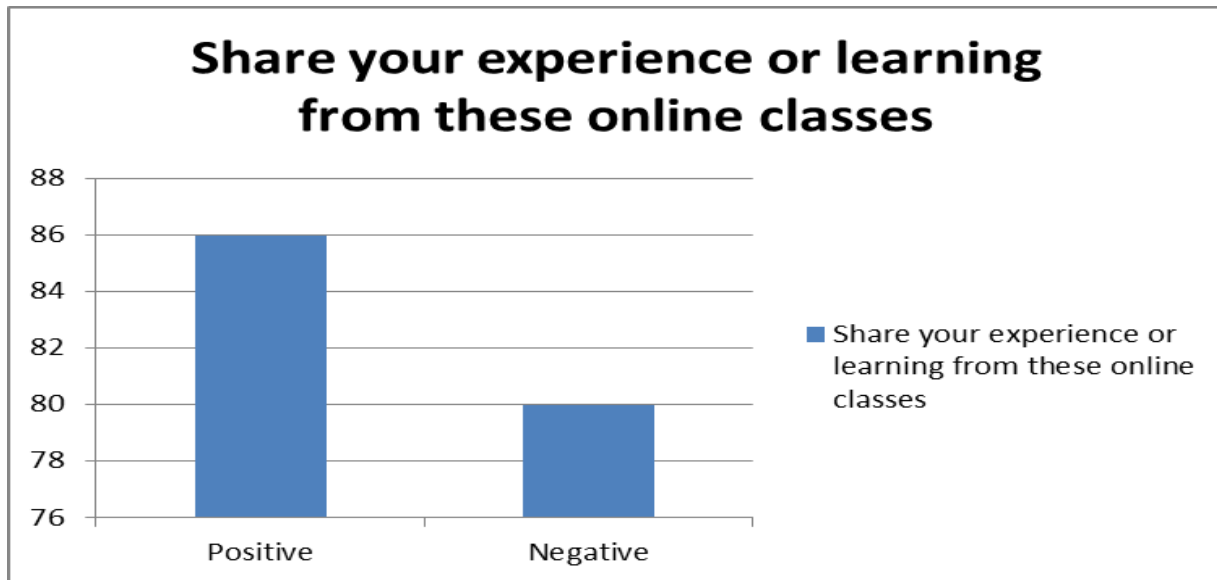


Fig.1. Male Students on experience on learning from online classes

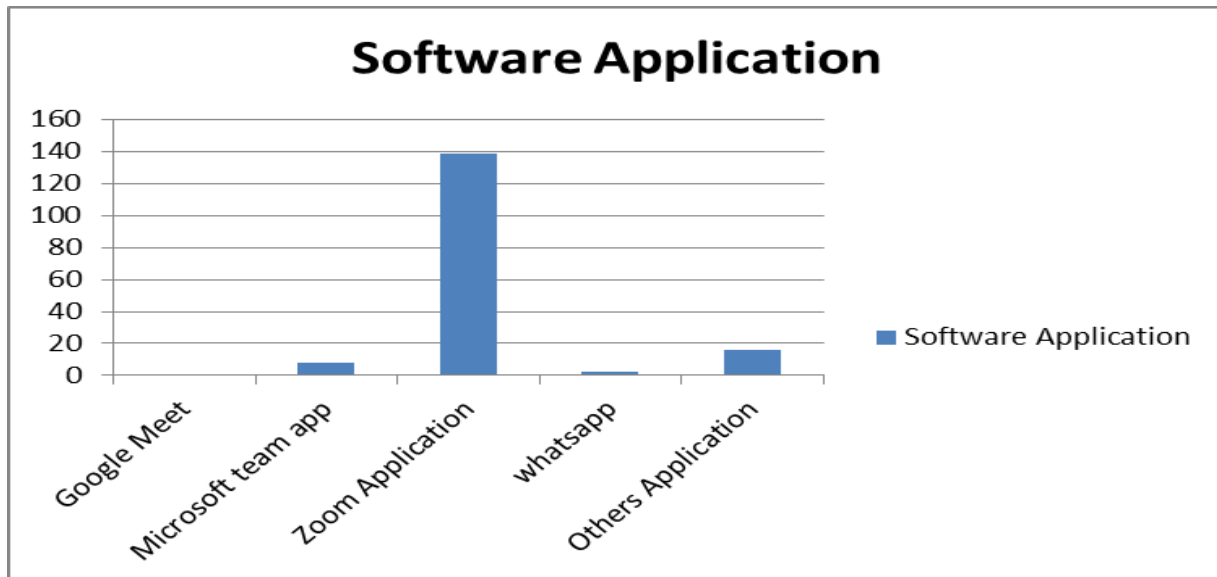


Fig.2. Male Students, selection of application for online classes

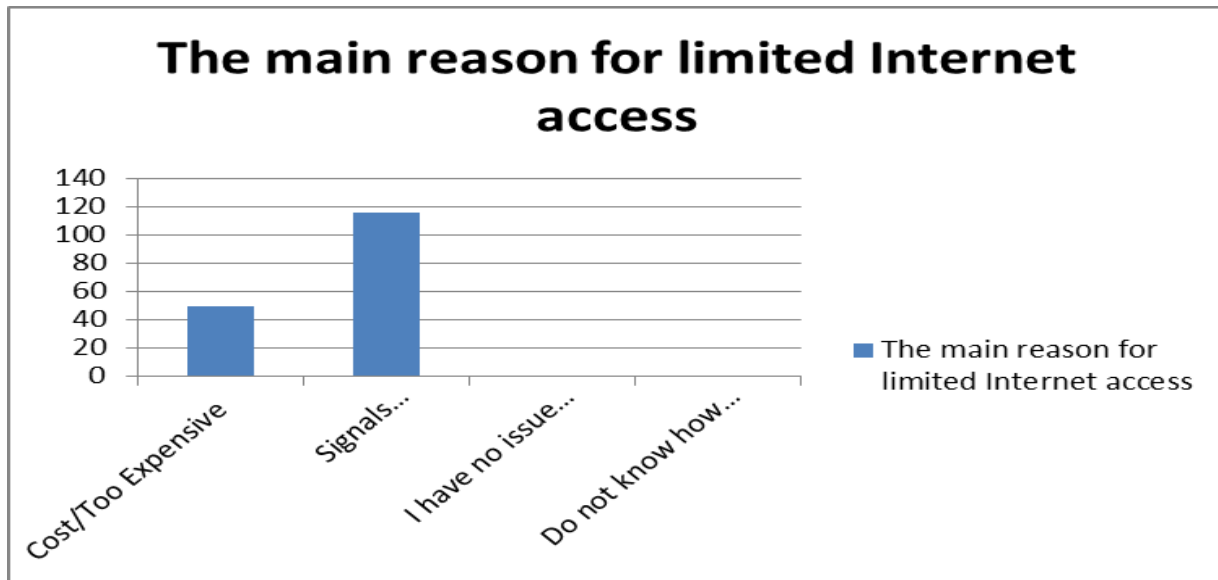


Fig.3. Male Students, Internet access issues

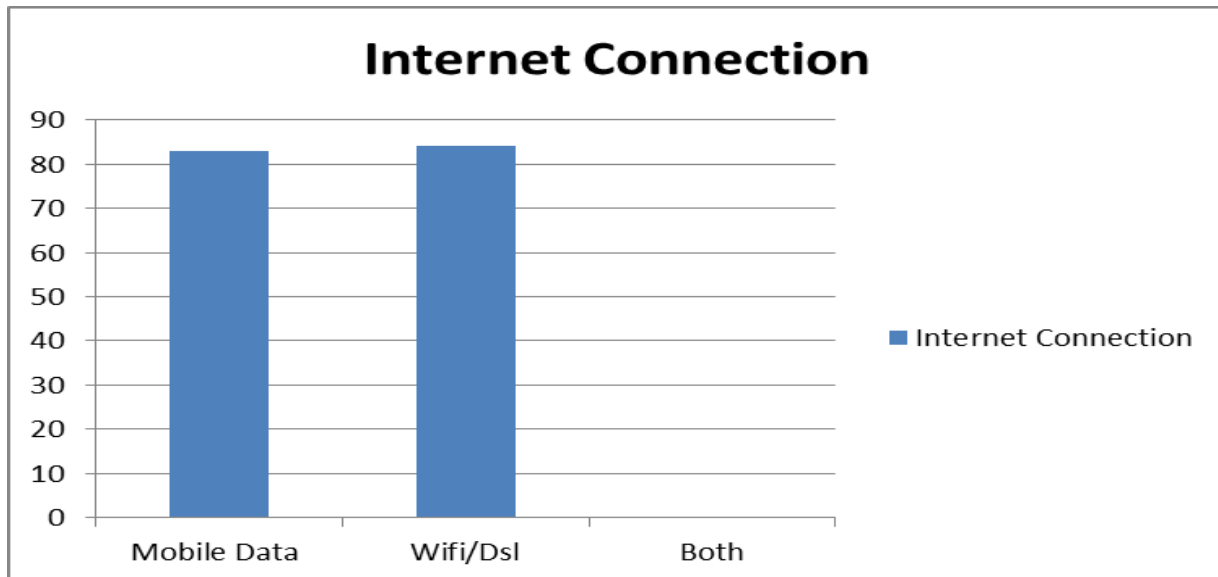


Fig.4 Male Students, Internet Connection

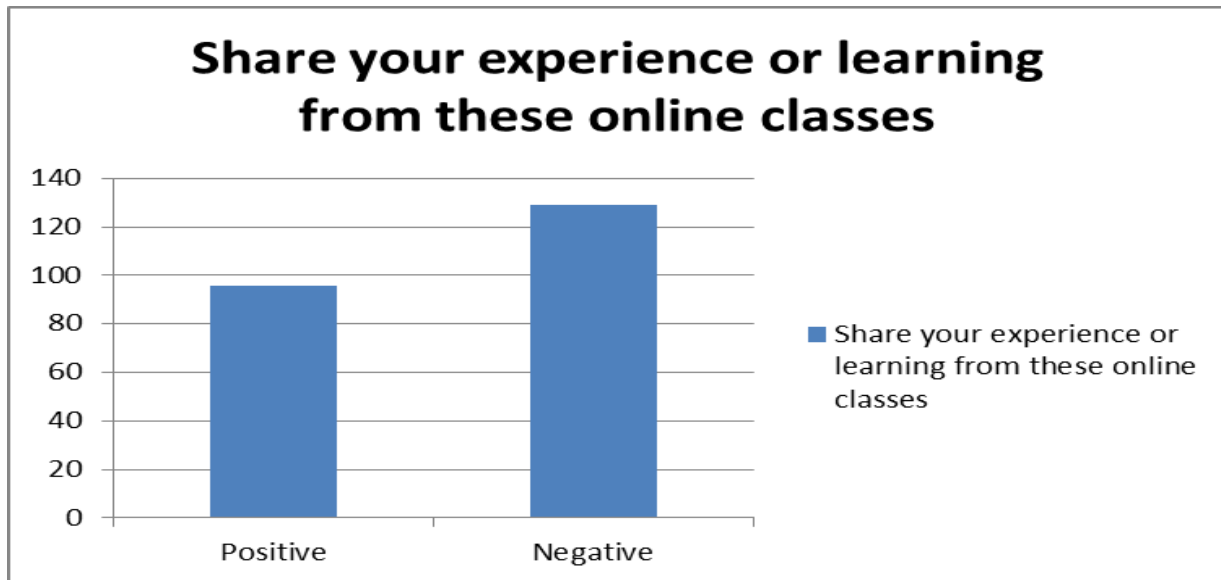


Fig.5. Female Students on experience on learning from online classes

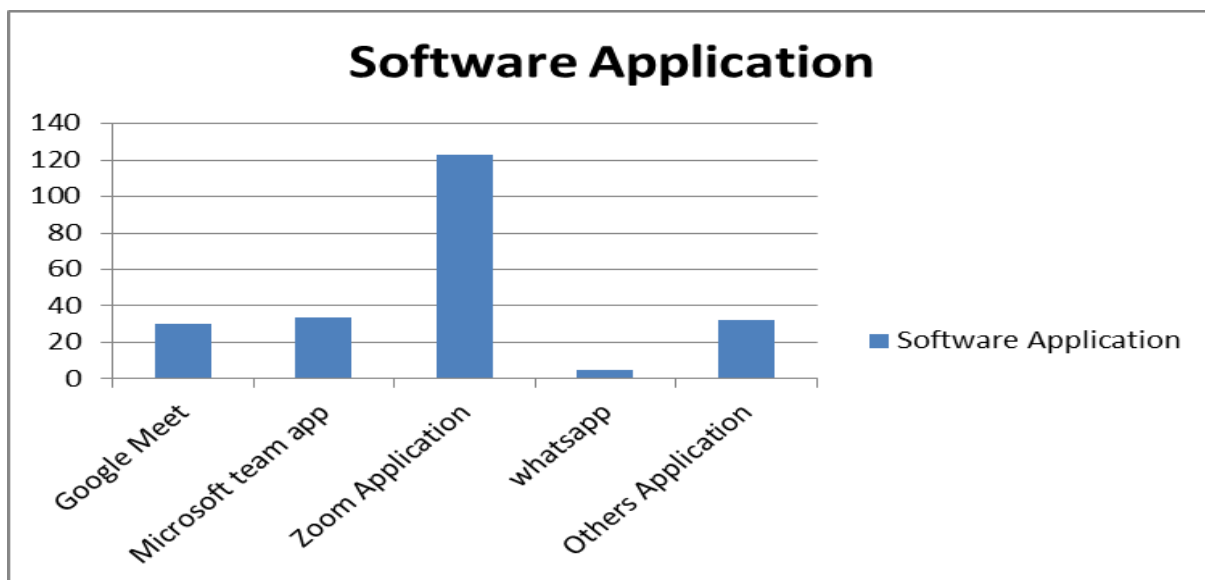


Fig.6. Female Students, Internet access issues

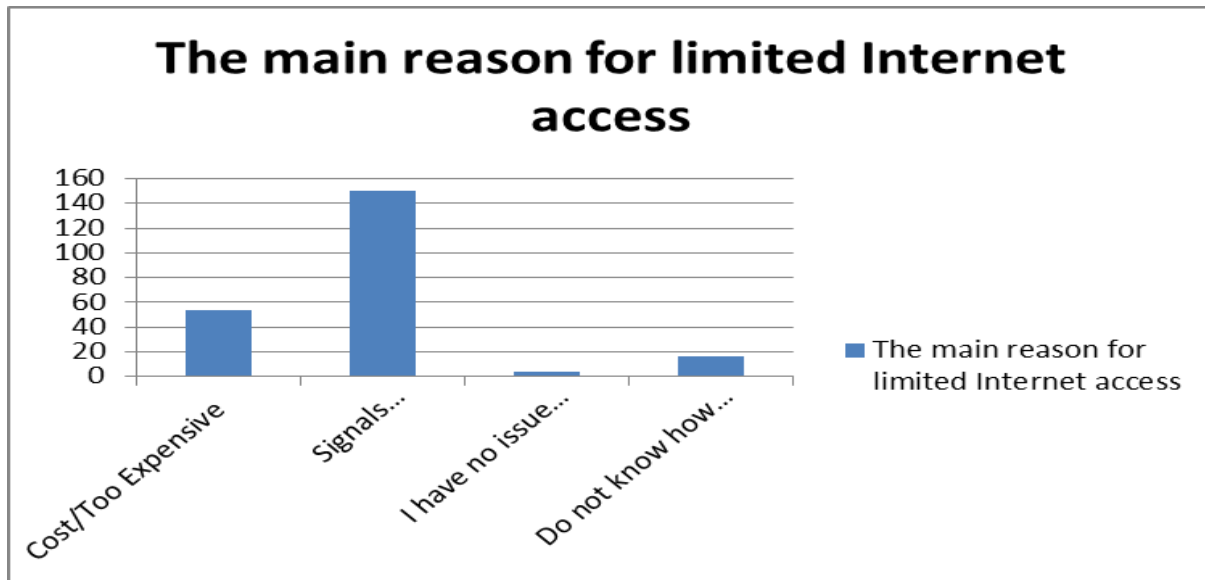


Fig.7. Female Students, Internet Connection

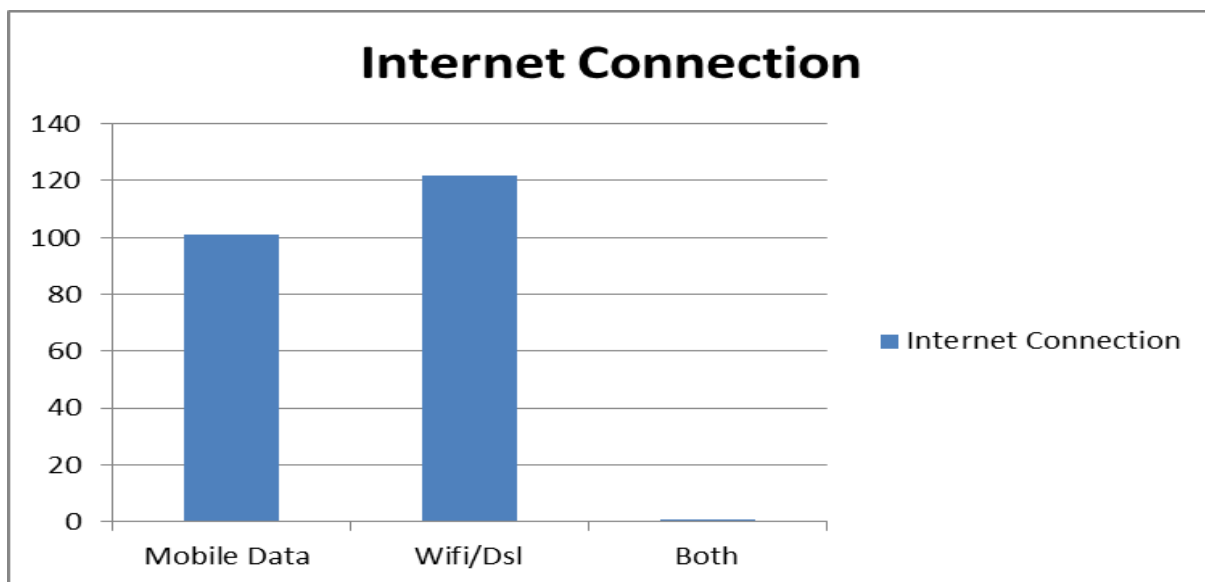


Fig.8. Female Students, selection of application for online classes

Figure 1 to figure 4 describes the result of the different question which we asked from male students such as 1) Share your experience or learning from these online classes 2) Software Application 3) The main reason for limited Internet access 4) Internet Connection. From figure 5 to figure 8 describes the result of the different question which we asked from female students such as 1) Share your experience or learning

from these online classes 2) Software Application 3) The main reason for limited Internet access 4) Internet Connection.

Table 3

Dependent Variable: Student Satisfaction			
Independent Variable	Coefficients	R-Square	F-test
Online Learning System	0.639***	0.41	268.72***

Note: P-values are significance at ***1%, **5%, and *10% respectively.

4. Result Discussion & Conclusion:

Table 3 shows the regression analysis results that describe positive and significant result between online learning system and student satisfaction. This finding supports the literature that the online learning system enhances student satisfaction and motivation, even some researchers concluded that online learning is provides a very friendly environment(Jeong & González-Gómez, 2016).

Students satisfaction and motivation is the main part to a successful learning outcome in both online and offline education systems. The student is not ready to adopt this transition, it is important the higher education commission of Pakistan has to build a proper framework according to the major challenges like a pandemic that motivate students, teachers, and other staff to adopt online learning system and to prepare strategies to implement online learning system in the education sector. To apply the effective online learning system at education institutions, interact with all stakeholders, and provide proper training to all stakeholders. There are many issues such as no such kind of fast and affordable internet access and the poor quality connection is another challenge for online learning in rural as well as some urban areas at educational institutions. In these areas, the majority of students have faced hinders (Wains & Mahmood, 2008). To implement an effective online learning system, first to develop a proper framework which helps to understand the challenges and problems in the online learning system, second to look after the student's problems during online classes such as internet issue, interaction with instructors, and mainly focus on training both students and instructors to produce better results.

5. Recommendation for future studies:

Pakistan should work to digitize its education system with the effective accessibility of the internet throughout the country. Pakistan transferred its higher education setup online but still exposed loopholes in its policy. Teachers are not well equipped and trained for online course classes, content design, and software apps to operate. A lack of IT infrastructure, which is the main hurdle this effective online teaching, student assessment, and internet connectivity significant challenges for students as well as faculty members (Rehman, Ahmad, & Ashraf). It is a good time for the ministry of education along with

other stakeholders to formulate strong strategies for the education sector. In the future, Pakistan should modernize its education system and low-cost accessible technology, including the internet in the most far off place in the country.

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Impacts Of Heuristic Biases on Investment Decision Making in Pakistani Market by Mediating Role of Locus of Control

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Abstract

The purpose and aim of our research studies is to identify the influence of three commonly heuristic biases for example availability, representative and overconfidence biasness on decision making, also identify how much these biases effects our investment. which is mediated by the locus of control bias. This is quantitative research in this research we used a review and questionnaire method on behalf of the getting data from respondents. Data is collected from 200 local financier of Sialkot Pakistan. From the results of this search study we revealed and disclosed the effect of three of our heuristics variables causes the investors towards diverge after logical decision-making process significantly and locus of control's have not a significant result on investment decision making process. Our model gives us perception much heuristic or other behavioral issues can tip the investor to some sub-optimal decision making process. Our research found that it is beneficial and useful for individual investor, foreign individual investor, managers of investment, and for policy makers also.

Keywords: Investment, Heuristics, Investment decision making, Pakistan, Biases.

Paper type: Research paper

1. Introduction

Investment is the method or process of investing wealth in order to gain future benefit or profit (Avazov & Maxmudoy, 2020). when the investor made decisions on the basis of clear mind, knowledge about the investment and effective research the can result in healthy outcome so the investor have to make proper research and gather knowledge about the investment and the investment area. It is human's thinking to get determined and maximum return on the assumption and irrational investment decisions that the investor made during investment. (Sattar, Toseef, & Sattar, 2020). In past few years, many researchers indicated that the best decision making process is always dependent on how much the investors have information and experience about the investment and investment areas (Sattar, Toseef, & Sattar, 2020). The heuristics behavior

influenced the investors while investing in bank deposits, gold & silver, residential flats and apartments, stock and shares and agricultural land (Vijayalakshimi, 2019). Being considered as rule of thumb it does not provide optimal and productive investment decisions but assists investors in making decisions based on the potential of problem solving. The present study mainly focuses on obtaining and understanding about heuristics biases such as psychology and investment behaviors of investors, recognizing the major types of heuristics (Johney & Royit, 2019). If people have knowledge about investment the best decision, he/she is able make and able to get higher future return. The major portion of this research is focused on individual's decision-making behavior. which are necessary in financial markets and other financial institutions like banks etc. especially the investors dispatch for bulk of activity (Gabaix, Gompers, & Metrick, 2001). Heuristics are set of rules or principles sometimes followed by investors for making their investment decisions to choose upon the suitable alternatives. The Understanding and awareness about investment and investment areas like financial market is very important to gain future benefit. If investor clearly understands the financial behavior or knowledge about behavioral finance it will help them in the selection of optimal instrument of investment such as investment in stock and shares, any banking product and property etc. as a result, they can resist the errors that cost a heavy amount in future. A heuristic method is basically an impure or unrefined rule of thumb used to make judgments about possibilities, future revenues generation and so on while a bias is said to be a partiality concerning making of judgmental errors (Tversky & Kahneman, 1974). These heuristics are sometimes useful in some cases specially when the investor have limited time to make decisions but in long run they might lead to biases and errors. Thus, heuristics and biases technique involve heuristic individuals employ to make judgement and linked biases in them. The relevant issues are how these biases and heuristics affect investment decision making. In each and every step of investment requires variety of choices and reasons for choosing particular investment area to invest wealth (Venkatapathy & sultana, 2016). It is difficult for investor to choose and select the areas of investment because sometimes the capital market provides higher return than the financial market. (wijjiya & Ferrari, 2020).

In this research study, mediating result of mediator in the connection of investment decision process and heuristic biases are discussed. Actually human memory is not durable and there are always chances of errors and mistakes. Some investors and people rely more on heuristics if they

think that their personal effort will increase the outcome and they will be dependent on their own instincts (Sharma et al, 1981). The main purpose and aim of this research is to discover impact of heuristics biases on investment decision creation process by investors with mediating role of LOC in Pakistan.

2. Literature Review

This section of research discusses, the influence of representativeness, overconfident and availability biases on the investment decision making process.

2.1 Investment Decision

Investment can be successful by doing research and gather proper information about investment and investment area (Shah, Ahmad, & Mahmood, 2018). The investment decisions are continuously made on the base of many factors such as current and potential shares of any company, technology use in the company and the value of company in the close period (Caselli & Negri, 2018). The best investment decisions are depending upon the financial information, data and the confidence level of investor in Pakistani market (Shawahna et al, 2017). Investor's conclusion is affected by his/her own behavioral preconceptions which sometimes lead to irrational investment conclusions and poor investment performance.

When the investment area is inefficient and role of information is weak so the investors fails to make profitable investment in the market. Investors use heuristics in their decision making and are irrational in their approaches. They are affected by week result like weekly high returns, previous prices, take risks with their investment and use market capitalization ratio. The Pakistani commercial markets and other investment areas are inefficient and investor do not have broad data and knowledge about market and market's changings changes. Sometimes the investors are not able or try to make rational investment decision due to their social preconception. The best way and method of thinking power will increase the quality of their decision making process. Sometimes it is useful to make desire decision but sometimes it result in negative and irrational decisions (Martjee & Mertand, 2012).

2.2 Representative Bias

In representative bias mean taking decision for investment on the biases of past performance of the same company relatively than the peer groups. In this bias the investor always tries to make decisions by judging something and correlating or comparing it with others. The decisions became unclear and vague, as it is not confirmed that the judgment is right or wrong (Tversky and Kahneman, 1970). They will be inclined to buy stocks, shares and any property which value have been increasing recently. It saves time and sometimes is right but usually results in representative bias and wrong decisions.

The investor always wishes to buy stocks, banking products, gold and property etc. to get high return (Chen et al, 2007). The biasness is occurred when investors make an investment as good or bad established on its recent presentation. Therefore, the investors always try to bought stocks etc. But in case of land, gold and dollar the investors try to invest their money to sell it when the prices of land, gold and dollar have risen. The investment decisions of the investors vary because of their representativeness that they relate company's condition to the past company's condition (Filbeck, 2005). According to Arrfelt (2013) this bias is began when the investors sees the reputation and past performance and success of the area of investment. They are unable to see that what the area of investment can give them in the future. So some areas of investment are good in past can go in loss in the future and vice versa (Petkova, 2014). The investors trust or depend on the factors like goodwill that vary with time so this is an irrational attitude of investor towards investment.

H1: The RB has a positive significant effect on LOC.

H2: RB has significant positive effect on DM.

2.3 Availability bias

Investors have healthier self-confidence, they rely on knowledge and skills for making better investment to get high return from their investments. some investors only believe on voluntarily available information rather than making research and examining the factors and alternatives attached with the investment which causes irrational investment decisions. The investors try to wish to invest in local aware and well-known companies which base on easily existing data (Waweru et al, 2008). Availability heuristics is often employed when people trust on current information to make their decisions and overlook all the previous data and details which make it biased opinion and wrong decisions (Kliger & Kudryavtsev, 2010).

In this research study we are focusing on investment in banks products, gold, lands and other properties and stocks etc. in Pakistani market and usually these decisions are made under undefined situations. Investors should calculate the chance of getting profits or earning loss on any stock and other investment area whether they want to sell, hold or purchase it.

H3: AB has positive impact on LOC

H4: OB biasness has major positive impact on DM.

2.4 Overconfidence Bias

The investors having large amount of Overconfidence will make him/her risk taker and risk seeker and the investors have the low confidence power will make him/her risk averse (Dominic & Gupta.2020). The overconfidence bias is one of the heuristic bias which defines as unnecessary faith in one's judgment and thinking power. The effect of overconfidence on investors is to misjudge and overestimate the knowledge and skills of investors. The investors who are overvalue and more confident about themselves for what they are or what they are not suffered from overconfidence bias. the overconfidence bias effects very greatly the decision making process and investment. Overconfidence also impacts investor's financial decisions and financial decision of an institute. The people's overconfidence is also affected by gender and age etc. (Tyynela & Perttunen, 2003). It greatly effects the decision making process of an investor while taking decision in investment. So the people(investors) should be under confident and not overconfident when they invest in different investment areas. In behavioral finance the overconfidence bias is one of the establish Heuristic and psychological factor and bias which effects the investment decision greatly (Dominic & Gupta.2020).

H5: OB has positive significant effect on LOC.

H6: OB has significant positive effect on DM.

2.5 Locus of Control

It is all about this person's own ability to think. Some investors think it is very helpful for investment decisions which leads to increase the output of the investment. There are two types of locus of controls. For example, if any investor thinks the confident result and outcome can grow due to some external factors, such as chance and luck are external locus of controls (Selart, 2005).

For investment decision it is very important to compare the connection among the investment decision making procedure and heuristics biases. For this purpose, we have knowledge about both internal and external locus of controls. The Internal locus of control expresses about person's own power and his/her ability and external locus of control includes the outside forces such as luck and chance etc. to control the outcomes of the investment so the investors have to know his/her own abilities to do perfect investment which can minimize the level of risk and losses of investment. Sometimes the investor does not know about his/her abilities and risk too much, some investors overvalue their abilities and trust that, they can control or change the market environments and investment areas (Gervais & O'dean, 2001).

H7: LOC has positive impact on DM.

H8: LOC mediates the relationship among AB and DM

H9: LOC mediates the relationship among RB and DM.

H10: LOC mediates the relationship among OB.

3. theoretical Framework:

3.1 Theoretical Design

The study which we did is aim to observe the effect of heuristic biases in investor's decision making which is being mediated by Locus of control. Study observed the relationships through conducting survey.

4. Research Methodology

The main objective of our research was to identify and investigate heuristic biases of investors and how it affects to local investor's decision making in Pakistan. In this part of study, we discuss the methods of collecting data and to analyze the collected data from respondents.

4.1 Research Design

In order to collect data from Pakistani local investors we used questionnaire method which records the responses along with Likert scale. The sample includes the investors from local market. Questionnaires were distributed among these investors.

4.2 Survey Research Method

It is a sequential process. According to our research, we have collected data in two stages. At first stage, we have written questionnaires for collecting data from respondents. For writing the questionnaires we get help from previous researcher's research papers consists of questions related to the age of respondents, amount of investment, age ranges and the years of experience in the first part. In the second part of our questionnaires it uses the availability, representative and overconfident heuristics to find their impact on Decision making when Locus of control plays the role of mediator. At second stage, we have selected 200 investors as our population sample from Sialkot Pakistan. We have collected data from different investors and according to that data we have taken certain decisions. This research method is also called "Field Experiment". It is conducted in natural environment. In order to collect data 200 questionnaires were distributed among local investors 150 were returned out of which 17 were spoiled and 133 were entered into the SPSS. Every individual investor that we have selected has experience starting from one year. Data is collected from Sialkot Pakistan. According to Osborne and Castell (2004), that there is no specific rule for determining sample size in case of behavioral studies.

4.3 Participant's Description

In this research we have selected male and female as our respondents. the total number of male respondents are 100% in our research and according to the age of respondents there is 20% respondents whose age is between 20 years to 25 years, there are 30.8% respondents whose age is 25 to 30 years, 41.5% respondents whose age is 30 to 35 years and there are 7.7% respondents whose age is above 35years. According to the year of experience of investors. There are 16 investors whose experience is less than 1 year, the 30.8% of respondents whose experience is 1 to 5 years, the 45.4% of respondent whose year of experience is 5 to 10 years, the 11.5% respondent whose year of experience is more than 10 years. According to the investment level 8.5% respondents whose investment level is less than 2 lac. 20% respondents whose investment level is 200000--350000, 53.8% respondents who invests 350000--600000 and 17.7% respondents whose

investment level is 6 lacs. According to our research the 88% respondents are individual and 6% respondents are individual foreigner.

5. Results and Discussion

This research aims to check the impact of three types of heuristic biases on decision making and Locus of control plays the mediating role. We collected data through questionnaire from 133 Pakistani local investors. The collected data through survey was tested with the help of SPSS.

Table no.1

Demographic variables

S.no	Demographic variable	Demographic characteristics	Frequency	Percentage
1	Age			
		• 20-25	26	20
		• 26-30	40	30.8
		• 30-35	53	41.5
		• Above 35	10	7.7
		Total	130	100.0
2	Gender			
		• Male	130	100
		• Female	0	0
		Total	130	100
3	Year of Experience			
		• Less than 1	16	12.3
		• 1-5	40	30.8
		• 5-10	59	45.4
		• More than 10	15	11.5
		Total	130	100.0
4	Investment			
		• Less than 200000	11	8.5
		• 200000—350000	26	20
		• 350000—600000	70	53.8
		• Above 600000	23	17.7
		Total	130	100.0
5	Investor Type			
		• Individual	130	100

		Total	130	100.0
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5.2 Reliability Analysis

To analyze reliability of study variables, the data from 130 investors was collected and entered into SPSS software. The reliability was identified by using Cronbach's α . The vales of Cronbach alpha should be above than 0.70 which concludes that this study is reliable for the future.

Table No. 2

Reliability analysis

Variable Name	Items	alpha
Availability bias	4	.700
representative bias	6	.715
Locus of Control	8	.702
Decision Making	5	.735
Overconfidence	6	.701

In this research according to the Cronbach's Alpha all items of variables are 7 and some are greater than 7. which shows that these items are reliable and use for future analysis. In this research study the Cronbach Alpha of locus of control is .702, availability bias is .700, representative bias is .715, decision making is .735 and the overconfidence is.701.

5.3 CORRELATION ANALYSIS

Table no 3

Correlation Analysis

availability bias	Representativ ebias	locusofcont rol	Decisionma king	overconfid ence
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availability bias	Correlation (Pearson)	1				
	Sig. (2-tailed)					
	N	130				
representative bias	Correlation (Pearson)	.373**	1			
	Significance 2-tailed	.000				
	N	130	130			
locus of control	Correlation (Pearson)	.373**	.528**	1		
	Significance 2-tailed	.000	.000			
	N	130	130	130		
Decision making	Correlation (Pearson)	.298**	.420**	.360**	1	
	Significance 2-tailed	.001	.000	.003		
	N	130	130	130	130	
overconfidence	Correlation (Pearson)	.224*	.183*	.249**	.290**	1
	Significance 2-tailed	.001	.038	.004	.001	
	N	130	130	130	130	130

**. Correlation is significant at the 0.01 level (2-tailed).

In the above analysis we can see that every variable has a 1 significance level when tested with itself. The output of correlation analysis shows positive relationship between the decision making and locus of control because the correlation between them is .373 which is significant at 0.000 level. Availability bias has a .298 correlation with decision making it means upto this level these two variables move in the same direction. Representative bias and locus of control has .420 and

.360 correlations with decision making respectively. According to our correlation analysis there is no any negative correlation between all the variables of study.

5.4 Coefficient Analysis

Table no. 4

Coefficients^a

Model	Unstandardized Coefficients..		Standardized Coefficients..	t	Sig.
	B	Std. Error	Beta		
Constant	.472	.480		.983	.328
Availabilitybias	.109	.091	.104	1.206	.230
representativebias	.328	.110	.280	2.986	..003
Overconfidence	.202	.089	.184	2.0274	.025
Locusofcontrol	.163	.121	.127	1.340	.193

a. Dependent Variable: Decision making

Value of B shows if there is increase in one unit of independent variable will take in increase in dependent variable. For example, the B value for availability bias is .109 that indicates by changing the independent variable dependent variable is also changed. Value of B for representative bias is .328 which means that if we cause a change in representative bias it will bring an increase of .328 in decision making and vice versa. All IV have a nonstop impact on decision making. The value of B for overconfidence is .202 which means that one unit change in overconfidence will bring .202 unit change in decision making

$$R^2 = .248$$

$$\text{Adjusted } R^2 = .224$$

$$F = 10.295$$

In our research according to this test we found the significant relation among our variables. And how much the independent variables significantly affect the dependent variable.

the Regression analysis also shows and defines that how one variable is changed by a change in other dependent or mediator variable.

Mediation Analysis

In order to check the role of mediator Sobel test is used Baron and Kenny(1986).

Particulars IV → MV → DV	Test statistics	Significance One-tailed Two-tailed	Type of mediation
AB → LOC → DM	5.0102328	0.000 0.000	Full
RB → LOC → DM	5.0256651	0.000 0.001	Full
OC → LOC → DM	1.8032122	0.000 0.005	partial

The result of this analysis shows that LOC has full mediation between first two types of biases whereas it has partial mediation when checked with overconfidence. First of all, we have run the regression analysis between AB and decision making then simple linear regression was run upon LOC and decision making the values of coefficients and standard error were entered into the Sobel test calculator in order to test the mediation. The results show T-Value as 5.0102328 and both significance one tailed and two tailed are less than 0.001 which shows that LOC plays full mediation between first two types of biases. In third type of bias i.e. overconfidence the value of one tailed is less than 0.001 but the value of two tailed is more than 0.001 that shows a partial mediation of Locus of Control.

Summary of Hypothesis Testing

	Hypothesis	Results
H1	AB has positive impact on LOC.	Accepted
H2	RB has positive significant impact on LOC.	Accepted
H3	OB has positive significant impact on LOC.	Accepted
H4	LOC has positive impact on DM.	Accepted

H5	AB has significant positive impact on DM.	Accepted
H6	LOC mediates the relationship between AB and DM	Accepted
H7	RB has significant positive impact on DM.	Accepted
H8	LOC mediates the relationship between RB and DM	Partially Accepted
H9	OB has significant positive impact on DM.	Accepted
H10	LOC mediates the relationship between OC and DM.	Partially Accepted

Conclusion

This study helps to check the impact of heuristic biases which are our independent variables like availability, representative bias and overconfidence upon the decision making process which is our dependent variable regarding investments and investment areas. Such biases occur because of most of the time investor prefers to rely or depends on their heuristics. Even if the investor has knowledge about finance and also the value of repayment associated with them but still they make irrational decisions because of the heuristics. Not only normal people become affected by these biases but also there are highly knowledgeable and well educated investors are affected by these heuristic biases. Not only biases but also locus of control play dynamic role in making investment decisions. The most frequently used heuristics used in decision making are representative and availability biases but the thing that mediates these biases are overconfidence and locus of control to some extent. Sometimes, investors decision may lead towards wrong valuation of outcomes. The investors at Pakistani markets are strongly influenced by these kind of biases. The reason behind this may be the culture and trend of the country due to which there is high involvement of such factors can be seen. Investors only gather information about one investment and implement that on other situations and other investment areas. They consider the decision only from one perspective and ignore the situations and circumstances of the other investment opportunity. Sometimes estimations about an offer may converted into wrong or the information provided to investors can be false, in such case investors that rely on biases may invest in non-profitable chance. The main aim of this research is to make the reader accepting of actual and real-life attitude of investors.

8. Future Implications and Limitations

Usually traditional finance is considered to be the rough phenomena, and it is failed to discuss problems related to behavioral finance. This study helps to concentrate or focus on such issues of human behavior that affects investment decisions process. Investors can consider this information in order to analyze an investment decision. This paper can also be use by the organizations seeking for investment to estimate the market culture and provides more knowledge regarding behaviors of investors. The policy makers can get benefit of this research for getting information about the market behavior. They get to know about the information regarding investment decisions in market and also investor's behavior. In this research study, only three kind of biases are discussed and used in order to find the results so all the other ignored biases can be studied in the near future.

- There was no representation of female gender so it is optional to conduct a research on only female investor as they get more inclined by the biases because of their emotional nature.
- Future research can also be conducted to check and identify the behavior of investors on a larger scale by selecting a large sample in different areas of investment.
- Another recommendation could be concerning about mediator, in future paper could be published on all the other biases with the mediating effect of locus of control.

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